

Search Details

Job Title/ Assay Name : HD excl Pasteurellaceae	Amplicon Sequence: GGTTGGTCTTTAAGACTGGCGCCCGAAGCTAACGTGATAAATCGAC CGCCTGGGGAGTACGGCCGCAAGGTTAAAACTCAAATGAATTGAC GGGGGCCCCGCACAAGCGGTGGAGCATGTGGTTTAATTTCGATGCAA CGCGAAGAACCTTACCTACTCTTGACATCCATAGAAGAACTCAGAG ATGAGTTTGTGCCTTCGGGAACCTATGTGACAGGTGCTGC
Effective Date : 2025-08-28	Forward: GGTTGGTCTTTAAGACTGGC
Database : core_nt	Reverse: GCAGCACCTGTCACATAG
Alignment algorithm : blastN	Probe: AACCACATGCTCCACCGCTTGT
Exclusive Organism:	Inclusive Organism: Pasteurellaceae
RID: AZWUTSVU015	Total Result: 4706
App Version: 1.0	

#Accessions	Oligo	Mutation	Impact
[Haemophilus] ducreyi/730 Analyzed Accessions: 21			
21	NA	No Mutations	Detected
Phocoenobacter skyensis/97481 Analyzed Accessions: 16			
3	Reverse	A13T	Detected
8	Forward	T7A, A15T	Not Detected
	Reverse	A13T	
3	Forward	T7G, C8T, A12G, G14A, A15C	Not Detected
	Reverse	A13T	
1	Forward	T7G, C8T, A12G, A15C	Not Detected
	Reverse	A13T	
1	Forward	T7A, A15T	Not Detected
	Reverse	A13T, T16C	
Haemophilus/724 Analyzed Accessions: 93			
2	Forward	T7G	Detected
	Reverse	A13T	
1	Forward	G1-, G2-, T7G, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16A	
1	Forward	G1-, G2-, T7G, A13G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16A	
9	Forward	T7G, C8G, G14C, A15T	Not Detected
	Reverse	A13T, A15T, T16A	
3	Forward	G6A, T7A, A12G, A15T, C16T	Not Detected
	Reverse	A13T, T16G	
6	Forward	G1-, G2-, T7G, T11A, A15C, C16T, C20T	Not Detected

#Accessions	Oligo	Mutation	Impact
	Reverse	A13T, T16G	
2	Forward	G1-, G2-, T7G, T11A, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T7G, A13T, A15T, C16T, C20T	Not Detected
	Probe	T21C	
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T7G, A13T, A15T, C16T, C20T	Not Detected
	Probe	C14T	
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T7-, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
6	Forward	G1-, G2-, T7G, T11A, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16G	
1	Forward	G1-, G2-, T7G, A13T, A15T, C16T, G19A, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	T7G, C8G, G14C, A15T	Not Detected
	Reverse	A13T	
2	Forward	G1-, G2-, T7G, T11A, A15C, C16T, C20T	Not Detected
	Reverse	A13T	
6	Forward	T7G, C8G, G14C, A15T	Not Detected
	Reverse	A13T, A17G	
1	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T	
5	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
1	Forward	G1-, G2-, T3-, T4-, G5-, G6-, T7-, A15C, C16T, C20T	Not Detected
	Reverse	A13T	
1	Forward	T7G	Not Detected
	Reverse	A13T, A17G	
2	Forward	G1-, G2-, T7G, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
13	Forward	G1-, G2-, T7G, T11A, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
2	Forward	G1-, G2-, T7G, T11A, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
17	Forward	T7G, C8G, G14C, A15T	Not Detected
	Reverse	A13T, T16A, A17C	
1	Forward	G1-, G2-, T7G, A13G, G14T, A15G, C20T, +17T	Not Detected
	Reverse	A13T, A15T, T16A	

#Accessions	Oligo	Mutation	Impact
6	Forward	G1-, G2-, T3-, T4-, G5-, T9C, A12G, +16G	Not Detected
	Reverse	C12G, A13T, C14T, A15C, A17G, G18A	
1	Forward	G1-, G2-, T7G, T11A, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
Pasteurella atlantica/2827233 Analyzed Accessions: 1			
1	Reverse	A13T	Detected
Haemophilus influenzae/727 Analyzed Accessions: 713			
1	Forward	T7G, C8G, A15T	Not Detected
	Reverse	A13T, A15T, T16A	
571	Forward	T7G, C8G, G14C, A15T	Not Detected
	Reverse	A13T, A15T, T16A	
3	Forward	T7G, C8G, G14C, A15T, T17C	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	T7G, C8G, G14C, A15T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T7G, T11A, A12G, A15C, C16T	Not Detected
	Reverse	A13T, T16A	
9	Forward	G1-, G2-, T7G, T11A, A12T, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
54	Forward	G1-, G2-, T7G, T11A, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T7G, T11A, A12G, A15C, C16T, C20T	Not Detected
	Probe	+4C	
	Reverse	A13T, A15T, T16A	
1	Forward	T7G, C8G, G14C, A15T	Not Detected
	Reverse	A13T	
1	Forward	T7G, C8G, G14C, A15T	Not Detected
	Probe	+1N	
	Reverse	A13T, A15T, T16A	
1	Forward	T7G, C8G, G14C, A15T	Not Detected
	Reverse	C12T, A13C, C14T, T16-	
6	Forward	T7G, C8G, G14C, A15T	Not Detected
	Reverse	A13T, A17G	
1	Forward	G1-, G2-, T7G, T11A, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
7	Forward	C8G, G14C, A15T	Not Detected
	Reverse	A13T, T16A, A17C	
52	Forward	T7G, C8G, G14C, A15T	Not Detected
	Reverse	A13T, T16A, A17C	

#Accessions	Oligo	Mutation	Impact
1	Forward	T7G, C8G, G14C, A15T	Not Detected
	Reverse	A13T, T16A	
2	Forward	G1-, G2-, T7G, T11A, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
Pasteurella multocida/747 Analyzed Accessions: 509			
3	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
34	Forward	G1-, G2-, T7G, T10A, A13T, A15C, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
390	Forward	G1-, G2-, T7G, T10A, A13T, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T7G, T10A, A13T, A15C, C16T, C20A	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T7G, T10A, A13T, A15C, C16T, C20T	Not Detected
	Probe	T18A	
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T7G, T10A, A13T, A15C, C16T, C20T	Not Detected
	Probe	C6G	
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T3-, T7G, T10A, A13T, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T7G, T10A, A13T, A15C, C16T, C20T	Not Detected
	Probe	A4T	
	Reverse	A13T, A15T, T16A	
4	Forward	G1-, G2-, T7G, T10A, A13T, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16A	
1	Forward	G1-, G2-, T7G, T10A, A13T, C20T	Not Detected
	Reverse	A13T, T16G	
1	Forward	G1-, G2-, T7G, T10A, A13T, A15C, C16T, C20T	Not Detected
	Reverse	G1-, C2-, A3-, G4-, C5-, A6-, C7-, A13T, A15T, T16A	
62	Forward	G1-, G2-, T7G, T10A, A13T, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16G	
1	Forward	G1-, G2-, T7G, T10A, A13T, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16G, G18T	
1	Forward	G1-, G2-, T7G, T10A, A13T, A15C, C16T, C20T	Not Detected
	Probe	A1C	
	Reverse	T11G, A13T, A15T, T16A	
6	Forward	G1-, G2-, T7G, T10A, A13T, A15C, C16T, C20T	Not Detected
	Probe	A1C	

#Accessions	Oligo	Mutation	Impact
	Reverse	A13T, A15T, T16A, G18A	
1	Forward	G1-, G2-, T3-, T4-, G5-, T9C, A12G, +16G	Not Detected
	Reverse	C12G, A13T, C14T, A15C, A17G, G18A	
Mannheimia haemolytica/75985 Analyzed Accessions: 275			
1	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16A	
5	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16G	
4	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
2	Forward	G1-, G2-, T7G, C8G, G14C, A15T	Not Detected
	Reverse	A13T, A17G	
1	Forward	G1-, G2-, T7G, A15C, C20T, +15T	Not Detected
	Reverse	A13T, A17G	
259	Forward	G1-, G2-, T7G, C8G, G14C, A15T, C20T	Not Detected
	Reverse	A13T, A17G	
1	Forward	G1-, G2-, T7G, C8G, T10A, G14C, A15T, C20T	Not Detected
	Reverse	A13T, A17G	
1	Forward	G1-, G2-, T7G, C8G, G14C, A15T, C20T	Not Detected
	Reverse	C8-, A13T, A17G	
1	Forward	G1-, G2-, T7G, C8G, G14C, A15T, C20T	Not Detected
	Probe	C6-, G7T, G8A	
	Reverse	A13T, A17G	
Pasteurellaceae bacterium/1938151 Analyzed Accessions: 259			
52	Forward	T7G, A15C, C16T	Not Detected
	Reverse	A13T, T16A	
79	Forward	T7G, A12G, A15C, C16T	Not Detected
	Reverse	A13T, T16A	
32	Forward	T7G, A15C, C16T	Not Detected
	Reverse	A13T, A15T, T16A	
4	Forward	T7G, A12G, A15C, C16T	Not Detected
	Reverse	A13T, A15T, T16A	
2	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T7G, A15C, C16T	Not Detected
	Reverse	A13T, A15T, T16C	
21	Forward	T7G, A15C, C16T	Not Detected

#Accessions	Oligo	Mutation	Impact
	Reverse	A13T, T16G	
3	Forward	T7G, A15C, C16T	Not Detected
	Reverse	A13T	
1	Forward	T7G, A12G, A15T, C16T	Not Detected
	Reverse	A13T, T16A	
1	Forward	G1-, G2-, T7G, T10A, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
2	Forward	T7G, T11A, A15C, C16T	Not Detected
	Reverse	A13T, T16A	
1	Forward	T3C, T7G, A12G, A15C, C16T	Not Detected
	Reverse	A13T, T16A	
1	Forward	T7G, A15C, C16T	Not Detected
	Reverse	A13T, T16A, +17A	
1	Forward	T7G, C8G, T10C, G14C, A15T	Not Detected
	Reverse	A13T, A15T, T16A	
2	Forward	T7G, A12G, A15C, C16T	Not Detected
	Reverse	A13T, T16G	
1	Forward	T7G, A12G, A15C, C16T	Not Detected
	Reverse	A13T	
1	Forward	T7G, A15C, C16T	Not Detected
	Reverse	+8C, A13T, T16A	
3	Forward	T7G, A12G, A15C, C16T	Not Detected
	Reverse	A13T, T16A, +17A	
1	Forward	C8G, G14T, A15-, +6A	Not Detected
	Reverse	A13T, A15T, T16A, A17G	
8	Forward	T7G, A15C, C16T	Not Detected
	Reverse	A13T, A15T, T16C	
1	Forward	G1-, G2-, T3-, T4-, G5-, G6-, T7-, C8-, T9-, T10-, A15T, C16A	Not Detected
	Reverse	A13T, T16A	
1	Forward	T7G, A12G, A15C, C16T	Not Detected
	Reverse	+11T, A13T, T16A	
3	Forward	G5T, T7G, A15C, C16T	Not Detected
	Reverse	A13T, A15T, T16C	
1	Forward	T7G, A15C, C16T	Not Detected
	Probe	+2A, +11A	
	Reverse	A13T, T16A	
7	Forward	T7G, A12G, A15C, C16T	Not Detected
	Reverse	A13T, A15T, T16C	
2	Forward	G6A, T7G, A12G, A15C, C16T	Not Detected

#Accessions	Oligo	Mutation	Impact
	Reverse	A13T, A15T, T16C	
1	Forward	G1-, G2-, T3-, T4-, G5-, G6-, T7-, C8-, T9-, T10-, A15T, C16A	Not Detected
	Probe	A3C	
	Reverse	G4C, A13T, T16A	
5	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16C	
3	Forward	T7G, T9C, A12G, A15C, C16T	Not Detected
	Reverse	A13T, A15T, T16C	
14	Forward	G1-, G2-, T7G, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16C	
1	Forward	G1-, G2-, T7G, C8G, G14C, A15T, C20T	Not Detected
	Reverse	A13T, A15T, T16C	
1	Forward	G1-, G2-, T7G, C8G, G14C, A15T, C20T	Not Detected
	Reverse	A13T, C14T, A15C, +16C	
1	Forward	G1-, G2-, T7G, A12G, A15C, C16T, C20T	Not Detected
	Reverse	G1-, C2-, A13T, C14T, A15C, +16C	
Glaesserella parasuis/738 Analyzed Accessions: 225			
2	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16A	
1	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
65	Forward	G1-, G2-, T7G, A13T, A15T, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
140	Forward	G1-, G2-, T7G, T11A, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
10	Forward	G1-, G2-, T7G, A13T, A15T, C16T, G19A, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T7G, A13C, A15T, C16T, C20T	Not Detected
	Probe	A4G	
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T7G, T11A, A12G, A15T, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T7G, T11A, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T7G, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T3-, T4-, T7G, A13T, A15T, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T7G, T11A, A12G, A15C, C16T, C20T	Not Detected

#Accessions	Oligo	Mutation	Impact
	Probe	T21C	
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T7G, A13T, A15T, C16T, C20T	Not Detected
	Reverse	A6G, A13T, A15T, T16A	
Haemophilus haemolyticus/726 Analyzed Accessions: 179			
3	Forward	T7G, C8G, G14C, A15T	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T7G, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16A	
2	Forward	T7G, C8G, G14C, A15T	Not Detected
	Reverse	A13T, T16G	
3	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16G	
5	Forward	G1-, G2-, T3-, T4-, G5-, G6-, T7-, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16G	
1	Forward	T7G, C8G, G14C, A15T	Not Detected
	Reverse	A13T, T16A	
3	Forward	T7G, C8G, G14C, A15T	Not Detected
	Reverse	A13T, A17G	
1	Forward	G1-, G2-, T3-, T4-, G5-, G6-, T7-, A15C, C16T, C20T	Not Detected
	Reverse	A13T	
14	Forward	G1-, G2-, T7G, T11A, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16G	
2	Forward	G1-, G2-, T7G, T11A, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
18	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
1	Forward	G1-, G2-, T7G, T11A, A15C, C16T, C20T	Not Detected
	Reverse	A13T	
1	Forward	T7G, C8G, T11A, A15C, C16T	Not Detected
	Reverse	A13T, A17G	
85	Forward	G1-, G2-, T7G, T11A, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
6	Forward	G1-, G2-, T3-, T4-, G5-, G6-, T7-, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
1	Forward	G1-, G2-, T7G, G14C, A15T, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
5	Forward	G1-, G2-, T7G, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	

#Accessions	Oligo	Mutation	Impact
1	Forward	G1-, G2-, T3-, T4-, G5-, G6-, T7-, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16A	
1	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T	
20	Forward	G1-, G2-, T7G, T11A, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
5	Forward	G1-, G2-, T3-, T4-, G5-, G6-, T7-, T11A, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
Avibacterium paragallinarum/728 Analyzed Accessions: 179			
100	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
2	Forward	G1-, G2-, T7G, A13G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16A	
1	Forward	G1-, G2-, T3-, T4-, G5-, G6-, T7-, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
64	Forward	G1-, G2-, T7G, A13G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, C14T, A15T, T16A	
6	Forward	G1-, G2-, T7G, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Probe	G5C, G13A	
	Reverse	C12T, A13T, C14T, A15T, T16A	
1	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Probe	G13A	
	Reverse	C12T, A13T, C14T, A15T, T16A	
1	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Probe	A1C, G5C, G13A	
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Probe	G13A	
	Reverse	A6C, C12T, A13T, C14T, A15T, T16A	
1	Forward	G1-, G2-, T7G, G14C, A15C, C16T, C20T	Not Detected
	Probe	A1C, T9G, G11A, G13A	
	Reverse	A13T, A15T, T16A	
Actinobacillus pleuropneumoniae/715 Analyzed Accessions: 131			
16	Forward	G1-, G2-, T7G, A15T, C20T	Not Detected
	Reverse	A13T, A17G	

#Accessions	Oligo	Mutation	Impact
7	Forward	G1-, G2-, T7A, T10G, A12G, A15T, C20T	Not Detected
	Reverse	A13T	
108	Forward	G1-, G2-, T7A, T10G, A12G, A15T, C20T	Not Detected
	Reverse	A13T, A17G	
Muribacter muris/67855 Analyzed Accessions: 126			
19	Forward	G1-, G2-, T7G, A15C, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
67	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
4	Forward	G1-, G2-, T7G, A12G, A15C, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T7G, A15C, C20T	Not Detected
	Reverse	A13T, C14T, A15T, T16A	
2	Forward	G1-, G2-, T3-, T4-, G5-, G6-, T7-, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16A	
21	Forward	G1-, G2-, T7G, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
9	Forward	G1-, G2-, T3-, T4-, G5-, G6-, T7-, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T7G, A15C, C20T	Not Detected
	Reverse	+6A, A13T, A15T, T16A	
1	Forward	G1-, G2-, T7G, A15C, C20T	Not Detected
	Reverse	A13T, C14T, A15C, +17A	
1	Forward	G1-, G2-, T7G, A12G, A15C, C16T, C20T	Not Detected
	Probe	+17G	
	Reverse	A13T, A15T, T16A	
Rodentibacter caecimuris/1796644 Analyzed Accessions: 94			
46	Forward	T7G, C8G, G14C, A15T	Not Detected
	Reverse	A13T, T16A	
35	Forward	T7G, C8G, G14C, A15T, G19A	Not Detected
	Reverse	A13T, T16A	
1	Forward	T7G, C8G, T10C, G14C, A15T	Not Detected
	Reverse	A13T, T16A	
1	Forward	G1-, G2-, T7G, C8G, G14C, A15T, G19A	Not Detected
	Reverse	A13T, T16A	
8	Forward	T7G, C8G, T10C, G14C, A15T, G19A	Not Detected
	Reverse	A13T, T16A	
1	Forward	T7G, C8G, G14C, A15T, C16T	Not Detected
	Reverse	A13T, T16A	

#Accessions	Oligo	Mutation	Impact
1	Forward	T7G, C8G, G14C, A15T, G19A	Not Detected
	Probe	+18G	
	Reverse	A13T, T16A	
1	Forward	T7G, C8G, T10C, G14C, A15T, G19A	Not Detected
	Reverse	+13T T, T16A	
Pasteurella/745 Analyzed Accessions: 69			
1	Forward	T7G, A15C, C16T	Not Detected
	Reverse	A13T, A15T, T16A	
2	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
6	Forward	G1-, G2-, T7G, A13T, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
25	Forward	G1-, G2-, T7G, T10A, A13T, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T7G, T10A, A13T, A15C, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	T7G, A15C	Not Detected
	Reverse	A13T	
2	Forward	T7G, A15C, C16T	Not Detected
	Reverse	A13T, T16A	
1	Forward	G1-, G2-, T7A, T11A, A13T, A15T, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T7G, T11A, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T7G, T10A, A13T, A15C, C16T, C20T	Not Detected
	Reverse	T9C, A13T, A15T, T16A	
1	Forward	G1-, G2-, T7G, T10A, A13T, A15C, C16T, C20T	Not Detected
	Probe	A1C	
	Reverse	A13T, A15T, T16A	
1	Forward	T7G, A15C, C16T	Not Detected
	Reverse	A13T	
4	Forward	G1-, G2-, T3-, T4-, G5-, G6-, T7-, A13T, A15C, C16A, C20T	Not Detected
	Reverse	A13T, T16A	
1	Forward	G1-, G2-, T7G, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16G	
2	Forward	T7G, A12G, A15C, C16T	Not Detected
	Reverse	A13T, T16A	
13	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16A	

#Accessions	Oligo	Mutation	Impact
1	Forward	G1-, G2-, T7A, A12G, A15T, C20T	Not Detected
	Reverse	A13T, T16G	
1	Forward	T7A, C8-, T10G, A13T, A15T	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	T7G, A15C, C16T	Not Detected
	Probe	+19A	
	Reverse	A13T, T16A	
1	Forward	G1-, G2-, T7G, C8G, A13G, G14C, A15C, C20T	Not Detected
	Reverse	A13T, T16A	
1	Forward	T7G, A12G, A15C, C16T	Not Detected
	Probe	+20A	
	Reverse	A13T, T16A	
1	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16G	
Aggregatibacter actinomycetemcomitans/714 Analyzed Accessions: 65			
1	Forward	G1-, G2-, T7G, A13G, G14C, A15C, C20T	Not Detected
	Reverse	A13T, T16A	
63	Forward	G1-, G2-, T7G, C8G, A13G, G14C, A15C, C20T	Not Detected
	Reverse	A13T, T16A	
1	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16G	
Aggregatibacter aphrophilus/732 Analyzed Accessions: 54			
1	Forward	T7G, T11A, A15C, C16T	Not Detected
	Reverse	A13T, A17G	
1	Forward	T7G, A12G, A15C, C16T	Not Detected
	Reverse	A13T	
1	Forward	G6A, T7G, A15C, C16T	Not Detected
	Reverse	A13T, T16G	
5	Forward	G1-, G2-, T7G, C8G, T10A, G14C, A15T, C20T	Not Detected
	Reverse	A13T, T16G	
2	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
9	Forward	G1-, G2-, T7G, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
34	Forward	G1-, G2-, T3-, T4-, G5-, G6-, T7-, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
1	Forward	G1-, G2-, T3-, T4-, G5-, G6-, T7-, A12G, A15C, C16T, C20T	Not Detected
	Probe	+11G	
	Reverse	A13T, A17G	

#Accessions	Oligo	Mutation	Impact
Haemophilus parainfluenzae/729 Analyzed Accessions: 52			
1	Forward	G6A, T7A, A15T	Not Detected
	Reverse	A13T, T16G	
11	Forward	G6A, T7G, A15C, C16T	Not Detected
	Reverse	A13T, T16G	
6	Forward	G6A, T7A, A15T, C16T	Not Detected
	Reverse	A13T, T16G	
8	Forward	G6A, T7G, A15T, C16T	Not Detected
	Reverse	A13T, T16G	
2	Forward	G6A, T7G, C16T	Not Detected
	Reverse	A13T, T16G	
9	Forward	G6A, T7G, A12G, A15C, C16T	Not Detected
	Reverse	A13T, T16G	
4	Forward	G6A, T7A, A13G, A15T, C16T	Not Detected
	Reverse	A13T, T16G	
6	Forward	G6A, T7A, A12G, A15T, C16T	Not Detected
	Reverse	A13T, T16G	
2	Forward	G6A, T7A, T10A, A15T, C16T	Not Detected
	Reverse	A13T, T16G	
1	Forward	G6A, T7G, A12G, A15T, C16T	Not Detected
	Reverse	A13T, T16G	
1	Forward	G6A, T7G, A12G, A15C, C16T	Not Detected
	Reverse	A13T, T16A	
1	Forward	G6A, A12T, A15C, C16T	Not Detected
	Reverse	A13T, T16G	
Actinobacillus equuli/718 Analyzed Accessions: 47			
20	Forward	G1-, G2-, T7A, A15T, C20T	Not Detected
	Reverse	A13T, A17G	
1	Forward	G1-, G2-, T7G, A15T, C20T	Not Detected
	Reverse	A13T, A17G	
1	Forward	G1-, G2-, A15T, C20T	Not Detected
	Reverse	A13T, A17G	
22	Forward	G1-, G2-, T7A, A12G, A15T, C20T	Not Detected
	Reverse	A13T, A17G	
1	Forward	G1-, G2-, T7A, A15T, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
2	Forward	G1-, G2-, T7A, T10G, A12G, A15T, C20T	Not Detected
	Reverse	A13T, A17G	
Rodentibacter pneumotropicus/758 Analyzed Accessions: 43			

#Accessions	Oligo	Mutation	Impact
1	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
24	Forward	T7G, A15C, C16T	Not Detected
	Reverse	A13T, T16A	
8	Forward	T7G, A15C, C16T	Not Detected
	Reverse	A13T, T16G	
4	Forward	T7G, A15C, C16T	Not Detected
	Reverse	A13T	
1	Forward	T7G, A15C, C16T	Not Detected
	Reverse	A13T, A15T	
1	Forward	T7G, A15C, C16T	Not Detected
	Reverse	A13T, A15T, T16G	
3	Forward	T7G, A15C, C16T	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16C	
Mannheimia varigena/85404 Analyzed Accessions: 41			
5	Forward	G1-, G2-, T7G, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16G	
29	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16G	
5	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16A	
2	Forward	G1-, G2-, T7A, A12G, A15T, C20T	Not Detected
	Reverse	A13T, T16A	
[Pasteurella] aerogenes/749 Analyzed Accessions: 36			
1	Forward	T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16G	
35	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16G	
Nicoletella semolina/271160 Analyzed Accessions: 30			
29	Forward	G1-, G2-, T7G, A13T, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T7G, A13T, A15T, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
Rodentibacter rattii/1906745 Analyzed Accessions: 26			
1	Forward	T7G, A15C, C16T	Not Detected
	Reverse	A13T, A15T, T16A	
5	Forward	T7G, A12G, A15C, C16T	Not Detected

#Accessions	Oligo	Mutation	Impact
	Reverse	A13T, T16A	
3	Forward	T7G, A15C, C16T	Not Detected
	Reverse	A13T, T16A	
1	Forward	T7G, A12G, A15C, C16T	Not Detected
	Reverse	A13T, T16C	
1	Forward	T7G, C8G, G14C, A15T	Not Detected
	Reverse	A13T, T16A	
1	Forward	T7G, A15C, C16T	Not Detected
	Reverse	A13T, A15T, T16C	
13	Forward	T7G, A12G, A15C, C16T	Not Detected
	Reverse	A13T, A15T, T16C	
1	Forward	T7G, A12G, A15C, C16T	Not Detected
	Reverse	C14T, A15T, T16C	
Bibersteinia trehalosi/47735 Analyzed Accessions: 24			
7	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16A	
8	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16G	
9	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
[Actinobacillus] rossii/123820 Analyzed Accessions: 23			
15	Forward	G1-, G2-, T3-, T4-, G5-, G6-, T7-, A15C, C16T, C20T	Not Detected
	Reverse	A13T	
3	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T	
2	Forward	G1-, G2-, T3-, T4-, G5-, G6-, T7-, T11A, A15C, C16T, C20T	Not Detected
	Reverse	A13T	
3	Forward	G1-, G2-, T7G, G14A, A15G, C20T, +17T	Not Detected
	Reverse	A13T, A17G	
Mannheimia/75984 Analyzed Accessions: 22			
3	Forward	G1-, G2-, T7A, A12G, A15T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
2	Forward	G1-, G2-, T7G, A12G, A15T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
2	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16A	
2	Forward	G1-, G2-, T7G, C8G, G14C, A15T, C20T	Not Detected
	Reverse	A13T, T16A	
2	Forward	G1-, G2-, T7A, A12G, A15T, C20T	Not Detected

#Accessions	Oligo	Mutation	Impact
	Reverse	A13T, T16G	
4	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16G	
3	Forward	G1-, G2-, T7G, C8G, G14C, A15T, C20T	Not Detected
	Reverse	A13T, A17G	
1	Forward	G1-, G2-, T7G, C8G, T10A, G14C, A15T, C20T	Not Detected
	Reverse	A13T, T16G	
1	Forward	G1-, G2-, T7G, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16A	
1	Forward	G1-, G2-, T7G, C20T	Not Detected
	Reverse	A13T	
1	Forward	G1-, G2-, T7G, C8G, G14C, A15T, C20T	Not Detected
	Reverse	A13T, T16G	
Actinobacillus capsulatus/717 Analyzed Accessions: 21			
2	Forward	G1-, G2-, T7G, A15T, C16T, C20T	Not Detected
	Reverse	A13T, T16A	
1	Forward	G1-, G2-, T7G, T11A, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T7G, C8G, T10A, G14C, A15T, C20T	Not Detected
	Reverse	A13T, T16-	
1	Forward	G1-, G2-, T7G, C8G, T10A, G14C, A15T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T7A, A15T, C20T	Not Detected
	Reverse	A13T, A17G	
1	Forward	G1-, G2-, T7A, A12G, A15T, C20T	Not Detected
	Reverse	A13T, A17G	
6	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16C	
1	Forward	G1-, G2-, T7G, A15T, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16C	
2	Forward	G1-, G2-, T7G, A13T, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16C	
1	Forward	G1-, G2-, T7G, A13T, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16C	
1	Forward	G1-, G2-, T7G, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16C	
1	Forward	G1-, G2-, T7G, A13T, A15T, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16C	
2	Forward	G1-, G2-, T7G, C16T, C20T	Not Detected

#Accessions	Oligo	Mutation	Impact
	Reverse	A13T, A15T, T16C	
Actinobacillus minor/51047 Analyzed Accessions: 20			
9	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16A	
6	Forward	G1-, G2-, T7G, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16A	
1	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T7G, T11A, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T7G, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16G	
1	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T	
Actinobacillus porcinus/51048 Analyzed Accessions: 19			
3	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
5	Forward	G1-, G2-, T7G, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T7G, T10A, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
2	Forward	G1-, G2-, T7G, C8T, A13T, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
4	Forward	G1-, G2-, T7G, T11A, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T7G, T10A, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T7G, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T	
1	Forward	G1-, G2-, T7G, T11A, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
1	Forward	G1-, G2-, T7G, T10A, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
Exercitatus varius/67857 Analyzed Accessions: 19			
1	Forward	G1-, G2-, T7G, A13T, A15C, C16T, C20T	Not Detected
	Reverse	A13T	
6	Forward	G1-, G2-, T7G, T10A, A15C, C16T, C20T	Not Detected

#Accessions	Oligo	Mutation	Impact
	Reverse	A13T	
4	Forward	G1-, G2-, T7G, G14A, A15G, C20T, +17T	Not Detected
	Reverse	A13T	
7	Forward	G1-, G2-, T7G, T9A, T10A, A15C, C16T, C20T	Not Detected
	Reverse	A13T	
1	Forward	G1-, G2-, C8T, T11A, A15C, C16T, C20T	Not Detected
	Reverse	A13T	
Pasteurella canis/753 Analyzed Accessions: 18			
5	Forward	G1-, G2-, T7G, A13T, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
12	Forward	G1-, G2-, T7A, A13T, A15T, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T7G, A13T, A15C, C16T, C20T	Not Detected
	Probe	A3T	
	Reverse	A13T, A15T, T16A	
Haemophilus parahaemolyticus/735 Analyzed Accessions: 17			
2	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
1	Forward	T7G, A15C, C16T	Not Detected
	Reverse	A13T, A17G	
13	Forward	G1-, G2-, T7G, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
1	Forward	G1-, G2-, T7A, A15T, C20T	Not Detected
	Reverse	A13T, A17G	
Actinobacillus/713 Analyzed Accessions: 16			
3	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
1	Forward	G1-, G2-, A12G, C20T	Not Detected
	Reverse	A13T, A17G	
5	Forward	G1-, G2-, A12G, C20T	Not Detected
	Reverse	A13T, T16G	
1	Forward	G1-, G2-, T7A, A15T, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
1	Forward	G1-, G2-, T7A, A12G, A15T, C20T	Not Detected
	Reverse	A13T, A17G	
2	Forward	G1-, G2-, T7A, A12G, A15T, C20T	Not Detected
	Reverse	A13T, T16G	
1	Forward	G1-, G2-, T7A, T10A, A15T, C16T, C20T	Not Detected
	Reverse	A13T, T16G	

#Accessions	Oligo	Mutation	Impact
1	Forward	G1-, G2-, T3-, T4-, G5-, G6-, T7-, A15C, C16T, C20T	Not Detected
	Reverse	A13T	
1	Forward	G1-, G2-, T7G, T9G, T10A, A15C, C20T	Not Detected
	Reverse	A13T, C14T, A15T, T16C	
Mannheimia glucosida/85401 Analyzed Accessions: 16			
1	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16A	
5	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
2	Forward	G1-, G2-, T7G, C8G, G14C, A15T, C20T	Not Detected
	Reverse	A13T, A17G	
3	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16G	
1	Forward	G1-, G2-, T7G, C20T	Not Detected
	Reverse	A13T	
1	Forward	G1-, G2-, T7-, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16G	
2	Forward	G1-, G2-, T7G, C8G, G14C, A15T, C20T	Not Detected
	Reverse	A13T, T16G	
1	Forward	G1-, G2-, T7G, G14C, A15T, C20T	Not Detected
	Reverse	A13T, T16G	
Mannheimia ruminalis/85403 Analyzed Accessions: 16			
1	Forward	G1-, G2-, T7G, C8G, G14C, A15T, C20T	Not Detected
	Reverse	A13T, T16A	
12	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16G	
2	Forward	G1-, G2-, T7G, C8G, G14C, A15T, C20T	Not Detected
	Reverse	A13T, T16G	
1	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	C8-, A13T, T16G	
Mannheimia pernigra/111844 Analyzed Accessions: 16			
14	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16G	
2	Forward	G1-, G2-, T7G, C8G, G14C, A15T, C20T	Not Detected
	Reverse	A13T, A17G	
Actinobacillus porcitosillarum/189834 Analyzed Accessions: 15			
15	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16A	
Gallibacterium/155493 Analyzed Accessions: 14			

#Accessions	Oligo	Mutation	Impact
2	Forward	G1-, G2-, T7G, T11A, A15T, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
3	Forward	G1-, G2-, T7A, T11A, A13G, A15T, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
5	Forward	G1-, G2-, T7G, T11A, A13G, A15T, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T7G, T9G, A13G, A15T, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
3	Forward	G1-, G2-, T3-, T4-, G5-, G6-, T7-, C8-, T9-, A12T, G18T, C20G	Not Detected
	Reverse	A13T, A15T, T16A	
Avibacterium/292486 Analyzed Accessions: 14			
3	Forward	T7G, A12G, A15C, C16T	Not Detected
	Reverse	A13T, T16A	
1	Forward	G1-, G2-, T7G, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16A	
4	Forward	G1-, G2-, T7G, A13G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	T7G, A15C, C16T	Not Detected
	Reverse	A13T, T16A	
3	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
2	Forward	G1-, G2-, T7G, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
Actinobacillus lignieresii/720 Analyzed Accessions: 14			
1	Forward	G1-, G2-, A12G, C20T	Not Detected
	Reverse	A13T, A17G	
1	Forward	G1-, G2-, A12G, C20T	Not Detected
	Reverse	A13T, T16G	
1	Forward	G1-, G2-, T7A, A15T, C20T	Not Detected
	Reverse	A13T, A17G	
3	Forward	G1-, G2-, T7G, T10G, A12G, A15T, C20T	Not Detected
	Reverse	A13T, A17G	
6	Forward	G1-, G2-, T7A, T10G, A12G, A15T, C20T	Not Detected
	Reverse	A13T, A17G	
1	Forward	G1-, G2-, T7G, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
1	Forward	G1-, G2-, T7G, A15T, C20T	Not Detected
	Reverse	A13T, A17G	
Actinobacillus indolicus/51049 Analyzed Accessions: 14			

#Accessions	Oligo	Mutation	Impact
6	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16A	
2	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T	
2	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16G	
2	Forward	G1-, G2-, T7G, T11A, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16G	
2	Forward	G1-, G2-, T7G, A12G, A13T, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16G	
Actinobacillus succinogenes/67854 Analyzed Accessions: 14			
4	Forward	G1-, G2-, T7G, T10A, A15C, C16T, C20T	Not Detected
	Reverse	A13T	
2	Forward	G1-, G2-, T7G, T9A, T10A, A15C, C16T, C20T	Not Detected
	Reverse	A13T	
8	Forward	G1-, G2-, T7G, T9G, T10A, A15C, C20T	Not Detected
	Reverse	A13T, A15T, T16C	
Aggregatibacter segnis/739 Analyzed Accessions: 13			
5	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
6	Forward	G1-, G2-, T7G, T9C, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
1	Forward	G1-, G2-, T7G, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
1	Forward	G1-, G2-, T3-, T4-, G5-, G6-, T7-, C8-, T9-, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
Canicola haemoglobinophilus/733 Analyzed Accessions: 12			
9	Forward	G1-, G2-, T7G, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T3-, T4-, G5-, G6-, T7-, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T7G, T11A, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
Aggregatibacter/416916 Analyzed Accessions: 11			
2	Forward	T7A, A15T, C16T	Not Detected
	Reverse	A13T, A17G	
1	Forward	G1-, G2-, T7G, C8G, T10A, G14C, A15T, C20T	Not Detected

#Accessions	Oligo	Mutation	Impact
	Reverse	A13T, T16G	
3	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
3	Forward	G1-, G2-, T7G, T9C, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
2	Forward	G1-, G2-, T3-, T4-, G5-, G6-, T7-, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
Actinobacillus suis/716 Analyzed Accessions: 11			
9	Forward	G1-, G2-, T7A, A15T, C20T	Not Detected
	Reverse	A13T, A17G	
2	Forward	G1-, G2-, T7A, A15T, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
Bibersteinia/476528 Analyzed Accessions: 11			
4	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
2	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16G	
2	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16A	
1	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	G1-, C2-, A3-, G4-, C12T, A13T, T16A	
1	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16A, G18A	
1	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, C14T, A15C, T16G	
Gallibacterium melopsittaci/516063 Analyzed Accessions: 11			
11	Forward	G1-, G2-, T7G, T9G, A13G, A15T, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
Avibacterium gallinarum/755 Analyzed Accessions: 10			
1	Forward	G1-, G2-, T7G, A13T, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
2	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T3-, T4-, T7G, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
2	Forward	G1-, G2-, T7G, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16A	
1	Forward	G1-, G2-, T7G, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	

#Accessions	Oligo	Mutation	Impact
3	Forward	G1-, G2-, T7G, A13G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
Basfia succiniciproducens/653940 Analyzed Accessions: 10			
10	Forward	G1-, G2-, T7G, A13G, A15C, C20T	Not Detected
	Reverse	A13T, T16G	
Rodentibacter haemolyticus/2778911 Analyzed Accessions: 10			
10	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16C	
[Pasteurella] mairii/757 Analyzed Accessions: 9			
5	Forward	G1-, G2-, T7G, A15T, C16T, C20T	Not Detected
	Reverse	A13T	
4	Forward	G1-, G2-, T7G, C16T, C20T	Not Detected
	Reverse	A13T	
Lonepinella/53416 Analyzed Accessions: 9			
3	Forward	G1-, G2-, C20T	Not Detected
	Reverse	A13T	
2	Forward	G1-, G2-, T7G, C8G, G14C, A15T, C20T	Not Detected
	Reverse	A13T	
3	Forward	G1-, G2-, T7G, A13G, A15C, C16T, C20T	Not Detected
	Reverse	A13T	
1	Forward	G1-, G2-, T7G, C16T, C20T	Not Detected
	Reverse	A13T	
Mannheimia granulomatis/85402 Analyzed Accessions: 9			
1	Forward	G1-, G2-, T7G, C8G, G14C, A15T, C20T	Not Detected
	Reverse	A13T, T16A	
7	Forward	G1-, G2-, T7G, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16G	
1	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16G	
Ursidibacter maritimus/1331689 Analyzed Accessions: 9			
9	Forward	G1-, G2-, T7G, T10A, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16G	
Testudinibacter/1755672 Analyzed Accessions: 8			
4	Forward	T7A, C8-, T10G, G14A, A15T	Not Detected
	Reverse	A13T, A15T, T16A	
4	Forward	T7G, C8-, T10G, G14A, A15C	Not Detected
	Reverse	A13T, T16G	
[Mannheimia] succiniciproducens/157673 Analyzed Accessions: 8			
6	Forward	G1-, G2-, T7G, A13G, A15C, C20T	Not Detected

#Accessions	Oligo	Mutation	Impact
	Reverse	A13T, T16G	
1	Forward	G1-, G2-, T7G, A13G, A15C, C20T	Not Detected
	Probe	T22G	
	Reverse	A13T, T16G	
1	Forward	G1-, G2-, T7G, A13G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16G	
Bisgaard Taxon 45/304289 Analyzed Accessions: 8			
8	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
Otariodibacter oris/1032623 Analyzed Accessions: 8			
2	Forward	G1-, G2-, T7G, T10A, A15C, C16T, C20T	Not Detected
	Reverse	A13T	
2	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
2	Forward	G1-, G2-, T7G, T10A, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
1	Forward	G1-, G2-, T7G, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
1	Forward	G1-, G2-, T3-, T7G, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
Mannheimia indoligenes/3103145 Analyzed Accessions: 8			
7	Forward	G1-, G2-, T7A, A12G, A15T, C20T	Not Detected
	Reverse	A13T, T16G	
1	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16G	
Frederiksenia canicola/123824 Analyzed Accessions: 7			
3	Forward	G1-, G2-, T7G, C8G, G14C, A15T, C20T	Not Detected
	Reverse	A13T, A17G	
3	Forward	G1-, G2-, T7G, C8G, T10A, G14C, A15T, C20T	Not Detected
	Reverse	A13T, A17G	
1	Forward	G1-, G2-, T7G, C8G, T10A, G14C, A15T, C20T	Not Detected
	Probe	A3C	
	Reverse	A13T, A17G	
Bisgaardia miroungae/1460875 Analyzed Accessions: 7			
6	Forward	G1-, G2-, T7G, T11A, A15C, C16T, C20T	Not Detected
	Reverse	G1-, C2-, A13T, A17G	
1	Forward	G1-, G2-, T7G, T11A, A15C, C16T, C20T	Not Detected
	Reverse	G1-, C2-, +10A G A, A13T, A17G	
Pasteurella dagmatis/754 Analyzed Accessions: 7			

#Accessions	Oligo	Mutation	Impact
2	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T7G, A13T, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
4	Forward	G1-, G2-, T3-, T4-, G5-, G6-, T7-, A13T, A15C, C16A, C20T	Not Detected
	Reverse	A13T, T16A	
Volucribacter psittacida/203482 Analyzed Accessions: 6			
5	Forward	G1-, G2-, T7G, T11A, G14T, A15G, C20T, +17T	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T7G, T11A, A13T, A15C, C16T, C20T	Not Detected
	Probe	T9G	
	Reverse	C12T, A13T, C14T, A15T, T16A	
Avibacterium volantium/762 Analyzed Accessions: 6			
2	Forward	G1-, G2-, T7G, A13G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T7G, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
2	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T7G, T11A, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
Spirabilibacterium mucosae/28156 Analyzed Accessions: 6			
4	Forward	C8G, G14T, A15-, +6A	Not Detected
	Reverse	A13T, A15T, T16A, A17G	
2	Forward	G14T, A15-, +6A	Not Detected
	Reverse	A13T, A15T, T16A, A17G	
Actinobacillus arthritidis/157339 Analyzed Accessions: 6			
1	Forward	G1-, G2-, T7A, A15T, C20T	Not Detected
	Reverse	A13T, T16A	
3	Forward	G1-, G2-, T7A, A15T, C16T, C20T	Not Detected
	Reverse	A13T, T16A	
1	Forward	G1-, G2-, T7A, A15T, C16T, C20T	Not Detected
	Reverse	G1-, C2-, A13T, T16A	
1	Forward	G1-, G2-, T7A, T10A, A15T, C16T, C20T	Not Detected
	Reverse	A13T, T16G	
Gallibacterium salpingitidis/505341 Analyzed Accessions: 6			
1	Forward	G1-, G2-, C8T, T9G, A13G, C16T	Not Detected
	Reverse	A13T	
1	Forward	G1-, G2-, C8T, T9A, A13G, C16T, C20T	Not Detected

#Accessions	Oligo	Mutation	Impact
	Reverse	A13T	
3	Forward	G1-, G2-, C8T, T9G, A13G, C16T, C20T	Not Detected
	Reverse	A13T	
1	Forward	G1-, G2-, C8T, T9G, A13G, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
Haemophilus sputorum/1078480 Analyzed Accessions: 6			
6	Forward	T7G, A15C, C16T	Not Detected
	Reverse	A13T, T16G	
Ursidibacter arcticus/1524965 Analyzed Accessions: 6			
4	Forward	G1-, G2-, T7G, T10A, A13T, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16G	
1	Forward	G1-, G2-, T7G, T10A, A13T, A15C, C16T, C20T	Not Detected
	Reverse	+6A, A13T, T16G	
1	Forward	G1-, G2-, T7G, T10A, A13T, A15C, C16T, C20T	Not Detected
	Reverse	A6-, A13T, T16G	
Rodentibacter abscessus/3381777 Analyzed Accessions: 6			
6	Forward	T7G, C8G, G14C, A15T	Not Detected
	Reverse	A13T, A15T, T16C	
Haemophilus influenzae biotype aegyptius/725 Analyzed Accessions: 5			
1	Forward	T7G, C8G, G14C, A15T	Not Detected
	Reverse	A13T, A15T, T16A	
4	Forward	G1-, G2-, T7G, T11A, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
Haemophilus aegyptius/197575 Analyzed Accessions: 5			
4	Forward	T7G, C8G, G14C, A15T	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	T7G, G14C, A15T	Not Detected
	Reverse	A13T, A15T, T16A	
Bisgaardia hudsonensis/109472 Analyzed Accessions: 5			
5	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
Actinobacillus anseriformium/221404 Analyzed Accessions: 5			
5	Forward	G1-, G2-, T7G, A15T, C20T	Not Detected
	Reverse	A13T, T16G	
Volucribacter/256730 Analyzed Accessions: 5			
2	Forward	G1-, G2-, T3-, T4-, G5-, G6-, T7-, C8-, T11G, A15C, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
3	Forward	G1-, G2-, T7G, T11A, A13T, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	

#Accessions	Oligo	Mutation	Impact
Testudinibacter aquarius/1524974 Analyzed Accessions: 5			
5	Forward	T7G, C8-, T10G, G14A, A15C	Not Detected
	Reverse	A13T, T16G	
Aggregatibacter kilianii/2025884 Analyzed Accessions: 5			
2	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
3	Forward	G1-, G2-, T7G, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
Caviibacterium pharyngocola/28159 Analyzed Accessions: 4			
3	Forward	G1-, G2-, T7G, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
1	Forward	G1-, G2-, T7G, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
Haemophilus pittmaniae/249188 Analyzed Accessions: 4			
1	Forward	G1-, G2-, T7G, C8G, T10A, G14C, A15T, C20T	Not Detected
	Reverse	A13T, T16G	
3	Forward	G1-, G2-, T7G, T11A, A13T, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16G	
Avibacterium endocarditidis/380674 Analyzed Accessions: 4			
1	Forward	G1-, G2-, T7G, A13G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16A	
2	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T7G, T11A, A12T, A15T, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
Vespertiliibacter pulmonis/1443036 Analyzed Accessions: 4			
1	Forward	G1-, G2-, T7G, A15T, C16T, C20T	Not Detected
	Reverse	A13T, T16G	
3	Forward	G1-, G2-, T7G, A12G, A15T, C16T, C20T	Not Detected
	Reverse	A13T, T16G	
Vespertiliibacter/1520333 Analyzed Accessions: 4			
1	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16G	
2	Forward	G1-, G2-, T7G, T9C, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16G	
1	Forward	G1-, G2-, T7G, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16G	
Rodentibacter rarus/1908260 Analyzed Accessions: 4			
4	Forward	T7G, A15C, C16T	Not Detected
	Reverse		

#Accessions	Oligo	Mutation	Impact
	Reverse	A13T, A15T, T16C	
Mannheimia bovis/2770636 Analyzed Accessions: 4			
3	Forward	G1-, G2-, T7G, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T7A, A12G, A15T, C20T	Not Detected
	Reverse	A13T, T16G	
Mesocricetibacter intestinalis/1521930 Analyzed Accessions: 3			
2	Forward	G1-, G2-, T7G, C8G, A13G, G14C, A15C, C20T	Not Detected
	Reverse	A13T, T16A	
1	Forward	G1-, G2-, T7G, C8G, A13G, G14C, A15C, C20T	Not Detected
	Reverse	A13T, T16A, +17A	
Pasteurella caballi/243701 Analyzed Accessions: 3			
3	Forward	G1-, G2-, T7A, A12G, A15T, C20T	Not Detected
	Reverse	A13T, T16A	
Actinobacillus ureae/723 Analyzed Accessions: 3			
2	Forward	G1-, G2-, T7G, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
1	Forward	G1-, G2-, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
Lonepinella koalarum/53417 Analyzed Accessions: 3			
1	Forward	T7G, A12G, A15T	Not Detected
	Reverse	A13T	
1	Forward	T7G, A12G, A15C	Not Detected
	Reverse	A13T	
1	Forward	T7G, T11A, A12G, A15T, C16T	Not Detected
	Reverse	A13T, T16G	
Actinobacillus delphinicola/51161 Analyzed Accessions: 3			
3	Forward	G1-, G2-, T7G, A13G, A15T, C20T	Not Detected
	Reverse	A13T, A17G	
Spirabilibacterium pneumoniae/221400 Analyzed Accessions: 3			
1	Forward	T7G, T9G, T10C, A12T, A15T	Not Detected
	Reverse	A13T, A17G	
2	Forward	T7G, T9G, A15T	Not Detected
	Probe	T21-	
	Reverse	A13T, A17G	
Haemophilus simiae/398232 Analyzed Accessions: 3			
1	Forward	T7G, A15C, C16T	Not Detected
	Reverse	A13T	
1	Forward	T7G, A12G, A15C, C16T	Not Detected

#Accessions	Oligo	Mutation	Impact
	Reverse	A13T	
1	Forward	G1-, G2-, T7G, C8G, T10A, G14C, A15T, C20T	Not Detected
	Reverse	A13T, T16G	
Rodentibacter myodis/1907939 Analyzed Accessions: 3			
3	Forward	T7G, A15C, C16T	Not Detected
	Reverse	A13T, A15T, T16A	
Rodentibacter/1960084 Analyzed Accessions: 3			
1	Forward	T7G, A12G, A15C, C16T	Not Detected
	Reverse	A13T, T16A	
1	Forward	T7G, A15C, C16T	Not Detected
	Reverse	A13T, A15T, T16C	
1	Forward	T7G, A12G, A15C, C16T	Not Detected
	Reverse	A13T, A15T, T16C	
Phocoenobacter atlanticus/3416742 Analyzed Accessions: 3			
3	Forward	T7G, A15C	Not Detected
	Reverse	A13T	
Actinobacillus hominis/719 Analyzed Accessions: 2			
2	Forward	G1-, G2-, T7A, T10G, A12G, A15T, C20T	Not Detected
	Reverse	A13T, A17G	
Cricetibacter osteomyelitis/1521931 Analyzed Accessions: 2			
2	Forward	G1-, G2-, T7G, C8G, G14C, A15T, C20T	Not Detected
	Reverse	A13T, T16A	
Actinobacillus seminis/722 Analyzed Accessions: 2			
1	Forward	G1-, G2-, T7G, T10A, A15C, C16T, C20T	Not Detected
	Reverse	A13T	
1	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T	
Haemophilus paraphrohaemolyticus/736 Analyzed Accessions: 2			
2	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
Avibacterium avium/751 Analyzed Accessions: 2			
2	Forward	G1-, G2-, T7G, A13G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
Pasteurella bettyae/752 Analyzed Accessions: 2			
2	Forward	G1-, G2-, T3-, T4-, G5-, G6-, T7-, C8-, T9-, T10-, A15C, C16T, C20T	Not Detected
	Reverse	A13T	
Alitibacter langaensis/756 Analyzed Accessions: 2			
1	Forward	G6A, T7G, T11A, A15C, C16T	Not Detected
	Reverse	A13T, T16G	

#Accessions	Oligo	Mutation	Impact
1	Forward	G6A, T7G, A15C, C16T	Not Detected
	Reverse	A13T, T16G	
Pasteurella stomatis/760 Analyzed Accessions: 2			
2	Forward	G1-, G2-, T7G, A13T, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
Conservatibacter flavescens/28161 Analyzed Accessions: 2			
1	Forward	T7G, C16T	Not Detected
	Reverse	A13T, T16A, A17C	
1	Forward	T7G, A12G, A15C, C16T	Not Detected
	Reverse	A13T, T16A, A17C	
Haemophilus influenzae-murium/67859 Analyzed Accessions: 2			
1	Forward	G1-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
1	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
Bisgaardia/109471 Analyzed Accessions: 2			
1	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
1	Forward	G1-, G2-, T7G, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
Haemophilus quentini/123834 Analyzed Accessions: 2			
2	Forward	G1-, G2-, T7G, T11A, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
Bisgaard Taxon 46/304290 Analyzed Accessions: 2			
2	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16A	
Spirabilliibacterium falconis/572023 Analyzed Accessions: 2			
2	Forward	T7C, C8T, T9G, A13T, A15G	Not Detected
	Reverse	A13T, A17G	
Necropsobacter massiliensis/1400001 Analyzed Accessions: 2			
2	Forward	G1-, G2-, T7G, A13T, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16A	
Pasteurellaceae bacterium Orientalotternb1/1524976 Analyzed Accessions: 2			
2	Forward	G1-, G2-, C20T	Not Detected
	Reverse	A13T, A17G	
Mannheimia massilioguelmaensis/1604354 Analyzed Accessions: 2			
2	Forward	G1-, G2-, T7G, T9A, T10A, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16A	
Frederiksenia/1649317 Analyzed Accessions: 2			

#Accessions	Oligo	Mutation	Impact
1	Forward	G1-, G2-, T7G, C8G, G14C, A15T, C20T	Not Detected
	Reverse	A13T, T16G	
1	Forward	G1-, G2-, T7G, C8G, G14C, A15T, C20T	Not Detected
	Reverse	A13T, T16A, A17C	
Rodentibacter trehalosifermentans/1908263 Analyzed Accessions: 2			
2	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
Caviibacterium/2070443 Analyzed Accessions: 2			
1	Forward	G1-, G2-, T7G, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
1	Forward	G1-, G2-, T7G, A13G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16A	
Haemophilus seminalis/2582921 Analyzed Accessions: 2			
2	Forward	G1-, G2-, T7G, T11A, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
Histophilus somni/731 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T7G, T11A, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
Necropsobacter rosorum/908285 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T7G, C8G, A12G, G14C, A15C, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
Chelonobacter oris/505317 Analyzed Accessions: 1			
1	Forward	T7A, C8-, T10G, G14A, A15T	Not Detected
	Reverse	A13T, A15T, T16A	
Bisgaard Taxon 3/28158 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T3-, T4-, G5-, G6-, T7-, C8-, T9-, A12T, G18T, C20G	Not Detected
	Reverse	A13T, A15T, T16A	
Volucribacter amazonae/256731 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T7G, T10A, A13T, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
Haemophilus taxon C/741 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16A	
Bisgaard Taxon 13/28155 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T7G, T10A, A13T, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
Bisgaard Taxon 2/28157 Analyzed Accessions: 1			
1	Forward	G1-, G2-, C8T, T9G, A13G, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	

#Accessions	Oligo	Mutation	Impact
Bisgaard Taxon 8/28162 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
Pasteurella caballi MCCM 00841/123813 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T7A, A12G, A15T, C20T	Not Detected
	Reverse	A13T, T16A	
Actinobacillus pleuropneumoniae MCCM 00189/123814 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T7G, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
Pasteurella haemolytica CCUG 28148/123818 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T7G, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16G	
Pasteurella aerogenes MCCM 01550/123819 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T	
Pasteurella aerogenes MCCM 01551/123821 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T3-, T4-, G5-, G6-, T7-, A15C, C16T, C20T	Not Detected
	Reverse	A13T	
[Haemophilus] felis/123822 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T7G, T10A, A13T, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
Pasteurella sp. MCCM 02539/123823 Analyzed Accessions: 1			
1	Forward	T7G, A15T, C16T	Not Detected
	Reverse	A13T, A15T, T16A	
Actinobacillus capsulatus P796/123825 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T7G, T11A, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
Pasteurellaceae bacterium Forsyth A3/123828 Analyzed Accessions: 1			
1	Forward	T7G, C8G, G14C, A15T	Not Detected
	Reverse	A13T, T16A	
Pasteurella sp. MCCM 02120/123831 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T7G, C8G, G14C, A15T, C20T	Not Detected
	Reverse	A13T, T16A	
Phocoenobacter uteri/146806 Analyzed Accessions: 1			
1	Forward	T7G, A15C, C16T	Not Detected
	Reverse	A13T	
Actinobacillus scotiae/182182 Analyzed Accessions: 1			
1	Forward	T7G, T9A, T10A, A15C, C16T	Not Detected
	Reverse	A13T, A15T, T16A	

#Accessions	Oligo	Mutation	Impact
TerraHaemophilus aromaticivorans/217202 Analyzed Accessions: 1			
1	Forward	G6A, T7G, A12G, A15C, C16T	Not Detected
	Reverse	A13T, T16G	
Pasteurellaceae bacterium C67/221391 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
Pasteurellaceae bacterium B96/37/221392 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T3-, T4-, G5-, G6-, T7-, C8-, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
Pasteurellaceae bacterium I6/300425 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Probe	G19-, +5C	
	Reverse	A13T, A15G, T16-	
Pasteurellaceae bacterium I7/300426 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
Pasteurellaceae bacterium I8/300427 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T7C, A15C, C16T, C20T	Not Detected
	Probe	G5-, G10-	
	Reverse	A13T, T16A	
Pasteurellaceae bacterium R46/392969 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T7G, A12G, A13T, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
Pasteurellaceae bacterium Clin29/463557 Analyzed Accessions: 1			
1	Forward	T7G, A15T, C16T	Not Detected
	Reverse	A13T, A15T, T16A	
Pasteurellaceae bacterium 19987/1/572011 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, T16G	
Pasteurellaceae bacterium 20215/4/572012 Analyzed Accessions: 1			
1	Forward	G1-, T7A, C8T, T9G, A15T, C16T	Not Detected
	Reverse	A13T, A15T, T16A	
Pasteurellaceae bacterium 31564/2sv/572013 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T3-, T4-, G5-, G6-, T7-, A15G, C20T, +17T	Not Detected
	Reverse	A13T, A15T, T16A	
Pasteurellaceae bacterium 62Hinz/572014 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T7G, T10A, A13T, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
Pasteurellaceae bacterium B96/6/572015 Analyzed Accessions: 1			

#Accessions	Oligo	Mutation	Impact
1	Forward	G1-, G2-, T7G, A15C, C16T, C20T, +11G	Not Detected
	Reverse	A13T, A15T, T16A	
Pasteurellaceae bacterium CCUG 36050/572016 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T7G, A15C, C16T, C20T, +11R	Not Detected
	Reverse	A13T, A15T, T16A	
Pasteurellaceae bacterium HIM786-1/572018 Analyzed Accessions: 1			
1	Forward	T7C, C8T, T9G, A13T, A15G	Not Detected
	Reverse	A13T, A17G	
Pasteurellaceae bacterium HP101/572019 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T7G, G14A, A15G, C20T, +17T	Not Detected
	Reverse	A13T, A15T, T16A	
Chelonobacter/658623 Analyzed Accessions: 1			
1	Forward	T7G, C8-, T10G, G14A, A15T	Not Detected
	Reverse	A13T, T16G	
Mannheimia caviae/879276 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T7A, A12G, A15T, C20T	Not Detected
	Reverse	A13T, T16G	
Pasteurellaceae bacterium P625/908282 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T7A, A12G, A15T, C20T	Not Detected
	Reverse	A13T, A15T, T16C	
Necropsobacter/908284 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T7A, A12G, A15T, C20T	Not Detected
	Reverse	A13T, A15T, T16C	
Pasteurellaceae bacterium Jack1/1032626 Analyzed Accessions: 1			
1	Forward	T3A, T7G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
Pasteurellaceae bacterium Svante2/1032628 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T7G, A12G, A13T, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
Pasteurellaceae bacterium Tulle1/1032633 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T7G, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A17G	
Pasteurellaceae bacterium Baika3/1032646 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T7A, A13T, A15T, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
Pasteurellaceae bacterium CCUG 17204/1248939 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T7G, C8G, T10A, G14C, A15T, C20T	Not Detected
	Reverse	A13T, A17G	
Pasteurellaceae bacterium CCUG 17205/1248940 Analyzed Accessions: 1			

#Accessions	Oligo	Mutation	Impact
1	Forward	G1-, G2-, A12G, C20T	Not Detected
	Reverse	A13T, A17G	
Pasteurellaceae bacterium CCUG 22043/1248941 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T7G, C8G, G14C, A15T, C20T	Not Detected
	Reverse	A13T, A17G	
Pasteurellaceae bacterium D2018_98/1248944 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T7G, C8G, T10A, G14C, A15T, C20T	Not Detected
	Reverse	A13T, A17G	
Pasteurellaceae bacterium D227_99/1248945 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T7G, C8G, T10A, G14C, A15T, C20T	Not Detected
	Reverse	A13T, A17G	
Pasteurellaceae bacterium D2941_98/1248947 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T7G, C8G, T10A, G14C, A15T, C20T	Not Detected
	Reverse	A13T, A17G	
Pasteurellaceae bacterium D452-3_99/1248948 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T7G, T10A, C20T	Not Detected
	Reverse	A13T, A17G	
Pasteurellaceae bacterium D536-2_99/1248949 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T7G, C8G, T10A, G14C, A15T, C20T	Not Detected
	Reverse	A13T, A17G	
Pasteurellaceae bacterium D597-2_99/1248950 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T7G, T10A, C20T	Not Detected
	Reverse	A13T, A17G	
Pasteurellaceae bacterium F12_denscaninum/1248951 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T7G, C8G, T10A, G14C, A15T, C20T	Not Detected
	Reverse	A13T, A17G	
Pasteurellaceae bacterium KM1266_04/1248955 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T7G, C8G, T10A, G14C, A15T, C20T	Not Detected
	Reverse	A13T, A17G	
Pasteurellaceae bacterium KM1549_04/1248956 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T7G, C8G, T10A, G14C, A15T, C20T	Not Detected
	Reverse	A13T, A17G	
Pasteurellaceae bacterium KM1721_06/1248957 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T7G, C8G, G14C, A15T, C20T	Not Detected
	Reverse	A13T, A17G	
Pasteurellaceae bacterium KM555_08/1248958 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T7G, C8G, G14C, A15T, C20T	Not Detected
	Reverse	A13T, A17G	
Pasteurellaceae bacterium M2500/96/3/1248959 Analyzed Accessions: 1			

#Accessions	Oligo	Mutation	Impact
1	Forward	G1-, G2-, T7G, C8G, G14C, A15T, C20T	Not Detected
	Reverse	A13T, A17G	
Pasteurellaceae bacterium feline oral taxon 357/1577324 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T7G, C8G, T10A, G14C, A15T, C20T	Not Detected
	Reverse	A13T, A17G	
Pasteurellaceae bacterium NI1060/1679001 Analyzed Accessions: 1			
1	Forward	T7G, C8G, G14C, A15T, G19A	Not Detected
	Reverse	A13T, T16A	
Pasteurellaceae bacterium RH1A/1823760 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T7G, C8G, A12G, G14C, A15T, C20T	Not Detected
	Reverse	A13T	
Rodentibacter mrazii/1908257 Analyzed Accessions: 1			
1	Forward	T7G, A12G, A15C, C16T	Not Detected
	Reverse	A13T, T16A	
Rodentibacter heidelbergensis/1908258 Analyzed Accessions: 1			
1	Forward	T7G, A15C, C16T	Not Detected
	Reverse	A13T, T16A	
Pasteurellaceae bacterium 12565/2093222 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T7G, C8G, G14C, A15T, C20T	Not Detected
	Reverse	A13T, A17G	
Pasteurellaceae bacterium 12591/2093223 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T7G, T10A, A13T, A15C, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
Glaesserella/2094023 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T7G, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T	
Glaesserella australis/2094024 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T7G, A12G, A15C, C16T, C20T	Not Detected
	Reverse	A13T	
Pasteurellaceae bacterium LIM206/3015882 Analyzed Accessions: 1			
1	Forward	T7G, A15C, C16T	Not Detected
	Reverse	A13T, A15T, T16A	
Gallibacterium faecale/3019086 Analyzed Accessions: 1			
1	Forward	G1-, G2-, T7G, T11A, A13G, A15T, C16T, C20T	Not Detected
	Reverse	A13T, A15T, T16A	
Mannheimia cairinae/3025936 Analyzed Accessions: 1			
1	Forward	T7G, A15C, C16T	Not Detected
	Reverse	A13T, A15T, T16A	
Pasteurellaceae bacterium 22721_9_1/3414265 Analyzed Accessions: 1			

#Accessions	Oligo	Mutation	Impact
1	Forward	G1-, G2-, T7A, A15T, C16T, C20T	Not Detected
	Reverse	A13T, T16G	
Gallibacterium anatis/750 Analyzed Accessions: 0			
Mergibacter septicus/221402 Analyzed Accessions: 0			
Pasteurella oralis/1071947 Analyzed Accessions: 0			
Gallibacterium trehalosifermentans/516935 Analyzed Accessions: 0			
Pasteurella testudinis/761 Analyzed Accessions: 0			
Bisgaard Taxon 44/371821 Analyzed Accessions: 0			
Gallibacterium group V/505339 Analyzed Accessions: 0			
Bisgaard Taxon 34/221401 Analyzed Accessions: 0			
Actinobacillus salpingitidis/721 Analyzed Accessions: 0			
Haemophilus paracuniculus/734 Analyzed Accessions: 0			
Actinobacillus cf. salpingitidis CCUG 28018/123837 Analyzed Accessions: 0			
Haemophilus cf. paragallinarum CCUG 18783/123840 Analyzed Accessions: 0			
Pasteurellaceae bacterium Hma5/435967 Analyzed Accessions: 0			
Pasteurellaceae bacterium Lv2/435968 Analyzed Accessions: 0			
Pasteurellaceae bacterium LvLi2/435969 Analyzed Accessions: 0			
Pasteurellaceae bacterium Trm1/435970 Analyzed Accessions: 0			
Pasteurellaceae bacterium Clin51/463558 Analyzed Accessions: 0			
Pasteurellaceae bacterium Clin7/463559 Analyzed Accessions: 0			
Pasteurellaceae bacterium Clin829/463561 Analyzed Accessions: 0			
Pasteurellaceae bacterium HIM730-5/572017 Analyzed Accessions: 0			
Pasteurellaceae bacterium HP288/572020 Analyzed Accessions: 0			
Pasteurellaceae bacterium HP289/572021 Analyzed Accessions: 0			
Pasteurellaceae bacterium MCCM 00825/572022 Analyzed Accessions: 0			
Pasteurellaceae bacterium Kleiz10105/627935 Analyzed Accessions: 0			
Pasteurellaceae bacterium BHMR2/1160097 Analyzed Accessions: 0			
Seminibacterium arietis/1173502 Analyzed Accessions: 0			
Haemophilus massiliensis/1461579 Analyzed Accessions: 0			
Pasteurellaceae bacterium feline oral taxon 358/1577323 Analyzed Accessions: 0			