

Gene Name	Source	Product	Function	Variant Position	Reference Alleles	Inserted Alleles	Start codon Impact	Stop codon Impact	Amino Acid Position	Reference Amino Acid	BCG Aeres Amino Acid
BCG_RS07850	Pasteur	PE family protein	involved in host immune interaction and pathogenesis	[271,273,276,277,279,280,282,296]	[T,C,T,C,C,C,C,C,C]	[C,A,A,T,A,T,T,G]	Start codon preserved	Stop codon preserved	[646,647,648,649,650]	[G,G,D,G,T]	[D,I,I,V,A]
BCG_RS03180	Pasteur	PE family protein	involved in host immune interaction and pathogenesis	[2735,2738]	[A,C]	[G,G]	Start codon preserved	Stop codon preserved	No change	No change	No change
BCG_RS18320	Pasteur	PE family protein	involved in host immune interaction and pathogenesis	[1793, 2113]	[G,T]	[A,C]	Start codon preserved	Stop codon preserved	[598]	[D]	[N]
BCG_RS18350	Pasteur	PE family protein	involved in host immune interaction and pathogenesis	[1796]	[G]	[A]	Start codon preserved	Stop codon preserved	[597]	[A]	[T]
FCU26_2107	Danish	putative transmembrane protein	involved in cell envelope-related processes	[302,303,304,305,306,307,308,309,310]	[C,C,C,C,C,C,C,C,C]	[.....]	Start codon preserved	Stop codon preserved	[105-200]	[G-V]	[V-H]