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[Continued on next page]

(54) Title: PROTEIN F - A NOVEL HAEMOPHILUS INFLUENZAE ADHESIN WITH LAMININ AND VITRONECTIN BIND-
ING PROPERTIES

A

1/1 5811 6121
ATG GGA AAT TGA TGC AAA ATT ATG ACC GCA CTT GCA CTT GGT TTA TTT GGA ATG CAA GCT AAC GCA AAA TTT AAA GTC GTA ACC ACT TTT
W R N S F X I M T A L A L G L F A M Q A N A K P K V V T T F
9101 92141 19191
GCG GTG ATT CAA GAT ATT GCG CAA AAT GCG GCA GCG AAT GCA GCA ACA GTG GAA TGT ATT ACC AAA CCA GGT GGT GAA ATT GAG GAG TAT
T V I Q D T A G N V A G N A A T V E S I T K P G A E I H E Y
19161 21171 24181
GAA CCA ACG CCA AAA GAG ATT GTA AAA GCG CAA TCT GCG GAT TTA ATT TTA TGG AAG GGC TTA AAT TTG GAA GGT TGG TTT GAG GGT TTG
E P T P K D I V K A Q S A D L L W N O L N L E R W F E R F
27191 301101 321111
TTC CAA AAT GGT AAA GAT AAA CCG GGT GTG GTA GTA ACA GAA GGT ATT CAA CCA TTA TCT ATT TAT GAA GGC CCG TAT AAA GAT GCG GCT
F Q N K D K P A V V Y T E D I Q D L S I Y E Q P F A D A P
361121 391131 421141
AAT CCA CAC GCT TGG ATG TCG CCA TCT AAT GCT TTA ATT TAT ATT GAA AAT ATT AAG AAT GCG TTA GTG AAA TAC GAT CCA CAA AAT GCA
N P H A W M S P S N A L I Y E N I K N A L V K Y D P Q N A
451151 481161 511171
GCT GTG TAT GAA AAA AAT GCG GGT GAT TAT GCT CAA AAA ATT AAA CAA CTT GAT GAA GCG CTT GGT GCA AAA TTA GCA CAA ATT CCA GAA
A V Y E K N A A D Y A G E I K Q L D E P I R A K L A Q I P E
541181 571191 601201
GCG GAA GCG TGG CTT GTA ACA AGT GAA GGT GGT TTC AGT TAT TTG GCG AAA GAT TAC AAG TTA AAA GAA GGT TAT TTA TGG GCA ATC AAT
A Q R W L V T S E G A F S Y L A R D Y N L K E G Y L W P I N
631211 661221 691231
GCT GAA CAA CAA GCG ACA CCA CAA CAA GGT AAA GTG ATT GAT TTA GTT GGT AAA AAC AAT ATT CCA GTT GTG TTT AGT GAA AGT ACA
A E Q G G T P Q Q V R K Y I D L V R K N N I P V V F S E T
721241 751251 781261
ATT TCA GCG AAA CTT GCA GAA GAA GGT AAA GAA AGT GGT GCA AAA TAC GGT GCG GTA TTG TAC GTT GAT TCA CTT TCT GCG AAA AAC
I S A K P A Q Q Y A K E S A N Y G S V I Y V D S L A R N
811271 841281 871291
GCG CCT GTG CCA ACT TAT ATT GAT TTG CTT AAC GTC ACC GTA TGA ACC ATT GTT AAA GSA TTC GCA AAA TAA
Q P V P T Y I D L L N V T V S T I V K G F G K

B**FIGURE 2.**

(57) Abstract: A vaccine composition comprising a protein, which can be detected in *Haemophilus influenzae*, having an amino acid sequence as described in SEQ ID NO: 1, or a fragment thereof, is described. The fragment comprises an amino acid sequence having at least 15 contiguous amino acids from the amino acid sequence of SEQ ID NO: 1, and the fragment (if necessary when coupled to a carrier) is capable of raising an immune response which recognises the polypeptide of SEQ ID NO: 1.



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— *with international search report (Art. 21(3))*

— *with sequence listing part of description (Rule 5.2(a))*