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(54) Title: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO *HELICOBACTER PYLORI* AND VACCINE COMPOSITIONS THEREOF

(57) Abstract

Recombinant or substantially pure preparations
 of *H. pylori* polypeptides are described. The nucleic
 acids encoding the polypeptides also are described.
 The *H. pylori* polypeptides are useful for diagnostics
 and vaccine compositions, wherein the figure depicts
 an amino acid sequence alignment of five *H. pylori*
 proteins.

108
123
133
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149

BLOCK A BLOCK B
 ---NGFGVVLGGKFAVKTQAVEHVGFYGLFYDQTFSSHKSY---ISTYGLEFS
 ---ALNGLGVQVGYKQFFG---ESKRNGLRYYTGFFDYNHGYIKSSF-FNSSSIIMTYGGGSD
 ---NGIGLVNMGYNHFFH---PDKVLGLRYFAPLDMQGYGMRYPKGYGGNNMITYGVGVD
 HGVINGFGIQUVGKQFFG---SKKNIGLRYYAFPDYFTQLGSLN-SAVKANIFTYGCAGTD
 VNAPNGFITKIGYKQFFG---ENKNVGLRYYGFFSYNGAGVGNP-TYNQVLLTYGVGTD
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BLOCK C
 GLWDAFNSPK---MFLGLEFGIGIAGATYMFPG---AMHGIIA---QYLGKENSIFQ
 LLVNFINDSITRKNM---LSVGLFGGIQLAGTWMNSQYHMLTAFNPP---YSKVVHNSFQ
 AINNPFQGSFYQDDIGVDIGVFGGIAIAGNSWYIGNKGQ---ELLGITN---SSAVDTSFQ
 FLNNIFRRVFSQDS---LNVGVFGGIQIAGNTWDS---SLRGQIENSFKYPTHTNFQ
 VLYNIFSRSPGSR---LNAGFFGGIQLAGDTYIS---TLRNSPQ---LASRPTITKQ

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BLOCK D BLOCK E
 LLVNVGFR---FGFFHN---ETFGKLFVJPNKKTIVDGLSATTLMRLP
 FLFNLGLRNLATAKKK---DSERSAQHGVLQIKIPTITN---YYSPLGKLEVRRLY
 FLFNFGRF---ALFVD---EHEFEGIKFPPTIANK---YYTDLAKVQHRVRF
 FLFNLGLRNIFASTHRRFLSASQSIQHGMEFGVKIPAINOR---YLKANGADVYHRLY
 FLFDVGLRNFGLKK---DLKSHNHSHJEIGVQIPTITNT---YYKAGGAEVKYPFY

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BLOCK F
 VAYFNITYNP
 SVYLVYVYAY
 AFYVGYNYHF
 AFYINVTIGP
 SVYVYGYAP

3 PDs

1 applⁿ (symbols)

5 Invs.

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