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(54) Title: IMMUNOGENIC PROTEIN AGAINST GONOCOCCAL INFECTION

Sequence of NHBA from *N. gonorrhoeae* 1291 SEQ ID NO: 1

FIG. 17

MFKRSVIAMACIFPLSACGGGGGGSPDVKSADTPSKPAAPVVAENAGEGVLPKEKKDEEA
AGGAPQADTQDATAGEGSQDMAAVSAENTGNGGAATTDNPKNEDAGAQNMPQNAEE
SANQTGNNQPAGSSDSAPASNPAPANGGSDFGRTNVGNSVVIDGPSQNTLTHCKGDPGNG
DNLLDEEAPPKSEFESLSDEEKIKKYKKDGEKFTGLVAIKVENNGLNKYTIYQAQPTRSAR
SRRSLPAEIPLIPVNQADTLIVDGEAVSLTGHSGNIFAPEGNRYLYTYGAEKLPGGSYALRV
QGEPAGKEMLAGTAVYNGEVLHFMENGRPYPSGGRFAAKVDFGSKSVLDGIIDSSDDLH
MGTQKFKAIDGNGFKGTWTENGGDVSGRFYGPAGEEVAGKYSYRPTDAEKGFGVFA
GKKDRD

Sequence of NHBA-C (c terminal fragment) SEQ ID NO: 2

LPAEIPLIPVNQADTLIVDGEAVSLTGHSGNIFAPEGNRYLYTYGAEKLPGGSYALRVQGE
PKGEMLAGTAVYNGEVLHFMENGRPYPSGGRFAAKVDFGSKSVLDGIIDSSDDLHMG
TQKFKAIDGNGFKGTWTENGGDVSGRFYGPAGEEVAGKYSYRPTDAEKGFGVFA
GKKDRD

(57) Abstract: This invention relates, inter alia, to an immunogenic fragment of a Neisserial Heparin Binding Antigen (NHBA) protein of *Neisseria gonorrhoeae* (SEQ ID NO: 1) for the prevention and treatment of *Neisseria gonorrhoeae* or gonococcal- or meningococcal-associated diseases and conditions. In some embodiments, the immunogenic fragment corresponds to a C-terminal fragment of the protein (SEQ ID NO: 2).



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