

Title (en)

METHODS AND COMPOSITIONS FOR NOROVIRUS BLOCKADE EPITOPE

Title (de)

VERFAHREN UND ZUSAMMENSETZUNGEN FÜR NOROVIRUS-BLOCKADEEPITOPE

Title (fr)

PROCÉDÉS ET COMPOSITIONS POUR DES ÉPITOPE DE BLOCAGE DE NOROVIRUS

Publication

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Application

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Abstract (en)

[origin: WO2014145245A2] The present invention provides methods and compositions comprising a chimeric norovirus capsid protein comprising a norovirus VP1 major capsid protein backbone comprising a norovirus epitope and/or motif selected from the group consisting of: a) Epitope A; b) Epitope B; c) Epitope C; d) Epitope D; e) Epitope E; f) NERK motif; and g) any combination of (a) through (f) above, wherein the norovirus epitope and/or motif is from a norovirus strain that is different from the norovirus VP1 major capsid protein backbone.

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

- [YD] LINDESMITH LISA C ET AL: "Immunogenetic mechanisms driving norovirus GII.4 antigenic variation.", PLOS PATHOGENS 2012, vol. 8, no. 5, 2012, pages e1002705, XP002762429, ISSN: 1553-7374
- [T] K. DEBBINK ET AL: "Chimeric GII.4 Norovirus Virus-Like-Particle-Based Vaccines Induce Broadly Blocking Immune Responses", JOURNAL OF VIROLOGY., vol. 88, no. 13, 16 April 2014 (2014-04-16), US, pages 7256 - 7266, XP055306276, ISSN: 0022-538X, DOI: 10.1128/JVI.00785-14
- [Y] ZHENG D P ET AL: "Norovirus classification and proposed strain nomenclature", VIROLOGY, ELSEVIER, AMSTERDAM, NL, vol. 346, no. 2, 15 March 2006 (2006-03-15), pages 312 - 323, XP024896729, ISSN: 0042-6822, [retrieved on 20060315], DOI: 10.1016/J.VIROL.2005.11.015 & DATABASE UniProt [online] 5 July 2004 (2004-07-05), "SubName: Full=Capsid protein {ECO:0000313|EMBL:AAR97648.1};", retrieved from EBI accession no. UNIPROT:Q6REW7 Database accession no. Q6REW7
- [Y] GREEN K Y ET AL: "A predominant role for Norwalk-like viruses as agents of epidemic gastroenteritis in Maryland nursing homes for the elderly", JOURNAL OF INFECTIOUS DISEASES. JID, UNIVERSITY OF CHICAGO PRESS, CHICAGO, IL, vol. 185, no. 2, 15 January 2002 (2002-01-15), pages 133 - 146, XP002253162, ISSN: 0022-1899, DOI: 10.1086/338365 & DATABASE UniProt [online] 1 March 2002 (2002-03-01), "SubName: Full=Capsid protein {ECO:0000313|EMBL:AAK50355.1};", retrieved from EBI accession no. UNIPROT:Q8VOP2 Database accession no. Q8VOP2
- [Y] K. E. DINGLE: "Mutation in a Lordsdale Norovirus Epidemic Strain as a Potential Indicator of Transmission Routes", JOURNAL OF CLINICAL MICROBIOLOGY, vol. 42, no. 9, 1 September 2004 (2004-09-01), US, pages 3950 - 3957, XP055345046, ISSN: 0095-1137, DOI: 10.1128/JCM.42.9.3950-3957.2004 & DATABASE EMBL [online] 29 April 2004 (2004-04-29), "Norovirus Hu/NLV/Oxford/B5S13/2002/UK capsid protein", retrieved from EBI accession no. EMBL:AAT00339
- [Y] J. J. SIEBENGA ET AL: "Epochal Evolution of GII.4 Norovirus Capsid Proteins from 1995 to 2006", JOURNAL OF VIROLOGY., vol. 81, no. 18, 3 July 2007 (2007-07-03), US, pages 9932 - 9941, XP055345077, ISSN: 0022-538X, DOI: 10.1128/JVI.00674-07 & DATABASE EMBL [online] 22 December 2006 (2006-12-22), "Norovirus Hu/GII.4/DenHaag89/2006/NL capsid", retrieved from EBI accession no. EMBL:ABL74395
- [A] KIM M C ET AL: "Virus-like particles containing multiple M2 extracellular domains confer improved cross-protection against various subtypes of influenza virus", MOLECULAR THERAPY, NATURE PUBLISHING GROUP, GB, vol. 21, no. 2, 1 February 2013 (2013-02-01), pages 485 - 492, XP002757485, ISSN: 1525-0024, [retrieved on 20121218], DOI: 10.1038/MT.2012.246
- See references of WO 2014145245A2

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