ABSTRACT

SECRETORY IgA AND IgG ANTIBODY INDUCER

A nasal vaccine is provided which induces the production of secretory IgA and IgG antibodies specific for flaviviruses, including hantaviruses. Furthermore, a method for providing protection against infection with flaviviruses by induces of the secretory IgA and IgG antibodies is also provided. The nasal vaccine includes an inactivated antigen of a flavivirus and poly(I:C) or a ceramified powder of surf clam shells as an adjuvant. The vaccine effectively induces secretion of IgA antibodies in the nasal mucosa and serum IgG antibody responses. Also provided is a method for inducing flavivirus-specific IgA and IgG antibodies, including administering an inactivated antigen of a flavivirus and poly(I:C) or a ceramified powder of surf clam shells as an adjuvant to the mucosa of a respiratory tract.