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(54) Title: MODIFIED INFLUENZA VIRUS FOR MONITORING AND IMPROVING VACCINE EFFICIENCY

(57) Abstract: The immunogenicity of the influenza virus hemagglutinin (HA) molecule may be increased by substitutions of amino acids in the HA sequence. The substitution of specific HA residues, such as asparagine at position 223 of H5 HA, increase the sensitivity of the hemagglutinin inhibition (HI) assay by altering receptor specificity and/or antibody-antigen binding. HA molecules containing such substitutions will be useful in the development of diagnostic reference viruses and improved influenza vaccines.

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