

Anti-influenza [2-12C] Standard Size Ab01105-200.0

This antibody does not have a J-chain.

This chimeric ferret antibody was made using the variable domain sequences of the original Human format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Ferret IgA

Clone Number: 2-12C

Alternative Name(s) of Target: H1N1; Influenza H1N1; Influenza A virus hemagglutinin glycoprotein;

Influenza A virus HA; HA; hemagglutinin

UniProt Accession Number of Target Protein: C3W5X2

Published Application(s): hemagglutination inhibition test, microneutralization assays, virus titration,

ELISA, IF

Published Species Reactivity: Influenza A virus hemagglutinin glycoprotein (HA)

Immunogen: This human 2-12C antibody was isolated from a donor that was exposed to

A/California/07/2009 virus.

Specificity: This antibody is specific for H1N1pdm09 hemagglutinin glycoprotein (HA). Influenza A virus has one of 16 possible hemagglutinin (HA) surface proteins and one of 9 possible neuraminidase (NA) surface proteins. The hemagglutinin protein facilitates viral attachment while Neuraminidase is involved in viral release. These proteins also elicit immune responses that prevent infection or independently reduce viral replication. The pandemic H1N1pdm09 virus (other nomenclatures: H1N1/09 virus, A(H1N1)pdm09 virus, A/California/07/2009(H1N1)pdm virus, etc.) is a swine origin Influenza A virus subtype H1N1 virus strain responsible for the 2009 flu pandemic.

Application Notes: This 2-12C antibody was isolated from a donor that was exposed to A/California/07/2009 virus. It was used as a control antibody alongside with other mAbs in enzyme-linked immunosorbent, indirect immunofluorescent, virus titration, hemagglutination inhibition (HAI), and microneutralization (MN) assays for the assessment of the binding activity of HA head-specific and head cross-reactive antibodies on cells infected with the variant viruses, and for the subsequent mapping of the HA1 K163 residue in former H1N1 viruses (Huang et al., 2015). This 2-12C antibody was reported to select a variant virus with HA substitutions K130E and G170R and, to retain the capacity to neutralize clade 6B viruses at <10 ng/ml similar to the ferret antisera (Huang et al., 2015).

Antibody First Published in: Huang et al. Focused antibody response to influenza linked to antigenic drift. J Clin Invest. 2015 Jul 1;125(7):2631-45.

PMID:26011643

Note on publication: Describe the original source of this antibody and its use as a control antibody to assess the binding activity of HA head-specific and head cross-reactive antibodies on cells infected with the variant viruses.

Product Form

Size: 50 μg Purified antibody.

Purification: Purified by Immobilized Metal Affinity Chromatography

Supplied In: PBS with 0.02% Proclin 300.

Storage Recommendation: Store at 4°C for up to 3 months. For longer storage, aliquot and store at -

20°C.

Concentration: 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.