

Anti-influenza [2-8C] Standard Size Ab01103-49.0

This antibody does not have a J-chain.

This chimeric ferret antibody was made using the variable domain sequences of the original Human IgG1 format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Ferret IgM

Clone Number: 2-8C

Alternative Name(s) of Target: influenza NP; influenza viral nucleoprotein; influenza nucleoprotein; NP; human influenza A virus; human influenza A viruses; Influenza A virus nucleoprotein (NP); Influenza A virus NP

UniProt Accession Number of Target Protein: P22435

Published Application(s): neutralisation assays, virus titration/quantification, WB, ELISA, IF, IHC

Published Species Reactivity: Influenza A virus nucleoprotein (NP)

Immunogen: This human antibody to influenza nucleoprotein (NP) 2-8C was obtained from human subjects in compliance with good clinical practice guidelines and the Declaration of Helsinki.

Specificity: This antibody reacts with influenza A virus nucleoprotein (NP), which is a structural protein which encapsidates the negative strand viral RNA. As well as binding ssRNA, NP is able to self associate to form large oligomeric complexes. NP is able to interact with a variety of other macromolecules of both viral and cellular origins. It binds the PB1 and PB2 subunits of the polymerase and the matrix protein M1. "NP has also been shown to interact with at least four cellular polypeptide families: nuclear import receptors of the importin class, filamentous (F) actin, the nuclear export receptor CRM1 and a DEAD box helicase BAT1/UAP56" (Portela et al, 2002).

Application Notes: This antibody was used in virus titration and microneutralization assays to aid the development of pseudotyped influenza A virus as a vaccine for the induction of heterotypic immunity (Powell et al., 2012) and to demonstrate that a single cycle influenza virus coated in H7 hemagglutinin provides heterotypic protection and neutralising antibody responses to both glycoproteins (Powell et al., 2017). This antibody might be useful for Western blotting, immunofluorescence (IF) and immunocytochemistry (IHC), for instance, to better understand the differential replication properties among H9N2 avian influenza viruses of Eurasian origin (Parvin et al., 2015) and to validate that a conserved influenza A virus nucleoprotein code controls specific viral genome packaging (Moreira et al., 2016).

Antibody First Published in: Powell et al. Pseudotyped influenza A virus as a vaccine for the induction of heterotypic immunity. J Virol. 2012 Dec;86(24):13397-406.

PMID:23015719

Note on publication: Desribe the original source of this antibody and its subsequent applications in virus titration and microneutralization assays.

Product Form

Size: 50 μg Purified antibody.

Purification: Affinity Purified using a recombinant lectin column

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.