

## Anti-HA cleavage site [A3] Standard Size Ab03021-15.0

This antibody does not have a J-chain and therefore presents as a hexamer, rather than a pentamer.

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

**Isotype and Format:** Human IgM, Kappa

**Clone Number:** A3

**Alternative Name(s) of Target:** Hemagglutinin Cleavage Site; CS HA; Avian Influenza Virus; H5N1

**UniProt Accession Number of Target Protein:** A5A5M5

**Published Application(s):** SPR, ELISA, IF

**Published Species Reactivity:** Influenza A (H5N1)

**Immunogen:** The original antibody was generated by immunizing mice with the cleavage site (CS) peptide of hemagglutinin protein, followed by antibody library construction and phage display-based selection.

**Specificity:** The antibody specifically recognizes the sequence (NS)PQRRER observed at the cleavage site of the hemagglutinin protein of the H5N1 avian influenza virus. The antibody does not cross-react with the HA protein of H1N1 or H7N7 strain.

**Application Notes:** The specificity of this antibody (Fab) was confirmed by ELISA. The epitope mapping of this antibody was done using ELISA. The binding affinity of the Fab fragment towards the cleavage site peptide of HA derived from the HPAI H5N1 virus was found to be  $K_d = 0,80$  nM using surface plasmon resonance. The clone was used for detection of the cleavage site peptide on an open sandwich ELISA, reaching the lower limit of detection (LOD) in the range of 1 to 10 ng/ml. This antibody was also used in the immunofluorescent staining of Madin-Darby canine kidney cells infected with HPAI H5N1 (Dong et al, 2013; pmid:23577205).

**Antibody First Published in:** Dong et al. Isolation of recombinant phage antibodies targeting the hemagglutinin cleavage site of highly pathogenic avian influenza virus PLoS One. 2013;8(4):e61158.

[PMID:23577205](#)

**Note on publication:** The paper describes the generation and characterization of the antibody.

## 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.