

## Anti-Matrix Protein [E10] Standard Size Ab01472-47.0

This chimeric human antibody was made using the variable domain sequences of the original mouse IgG2a format, for improved compatibility with existing reagents, assays and techniques.

**Isotype and Format:** Human IgA2, Kappa

**Clone Number:** E10

**Alternative Name(s) of Target:** M; Matrix protein 1; Matrix protein 2; M1; M2; Proton channel protein M2; M2-E10

**UniProt Accession Number of Target Protein:** P03485; P05780

**Published Application(s):** WB, ELISA, FC, IHC

**Published Species Reactivity:** Influenza A virus

**Immunogen:** This antibody was raised by immunising mice with the matrix protein 2 (M2) extracellular domain peptide-KLH conjugate.

**Specificity:** This antibody recognises both M1 and M2 proteins of all Influenza A viruses. The M1 protein is critical for assembly and budding, interacting with the influenza hemagglutinin (HA) and neuraminidase (NA) proteins. M2 is a transmembrane protein that has been found to play a role in Influenza replication and assembly of virion particles. It has been shown that this protein is an acid-activated ion channel for virus replication.

**Application Notes:** E10 antibody may be used both to detect Influenza A viruses and to identify proteins M1 and M2. This antibody was used to compare the amount of M1 and M2 proteins between wild-type and recombinant Influenza viruses (Bourmakina and García-Sastre, 2005). It was also utilised in the flow cytometric analysis of the knockdown efficiency of M2 protein (Gannagé et al., 2009). Finally, E10 antibody successfully immunostained MDCK cells in experiments attempting at establishing the titers of the virus (Ramos et al., 2013).

**Antibody First Published in:** Bourmakina and García-Sastre The morphology and composition of influenza A virus particles are not affected by low levels of M1 and M2 proteins in infected cells. J Virol. 2005 Jun;79(12):7926-32. [PMID:15919950](#)

**Note on publication:** This article describes one of the earliest identified uses of the E10 antibody to detect M1 and M2 proteins.

## 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.