

Goat Anti-Influenza A Virus M1 Polyclonal Antibody

Goat, Polyclonal (Influenza A Virus M1)

Cat. No. DPAB0167

Lot. No. (See product label)

PRODUCT INFORMATION

Product Overview: Goat Antibody to Influenza A Virus Matrix Protein M1 Fluorescein conjugated

Antigen Description: Influenza virus type A matrix protein, also known as M1, is composed of a 252 amino acid sequence and is type-specific in influenza viruses. It is located inside the viral lipid envelope and plays a key role in virus assembly and replication. M1 can be isolated from particles by removing the envelope with detergents and reducing the pH to 4.0.

Specificity: Influenza A matrix protein (M1). Recognizes the M1 protein for any strain of Influenza A. Conservation of the matrix protein sequence between hemagglutinin/Neuraminidase typed strains. Does not react with the M2 matrix protein. Does not react with HEp-2 cells by indirect immunofluorescence. Does not react with Influenza B, Adenovirus, Respiratory syncytial virus and Parainfluenza viruses. (1-3)

Immunogen: Purified M1 protein, Influenza A-Phillipines (H3N2)

Host animal: Goat

Format: FITC, Liquid

Applications: Suitable for use in direct IFA. A starting range of 1:10–1:50 is suggested. Acetone fixation of the antigen source is recommended prior to staining. Not recommended for use in IHC. Each laboratory should determine an optimum working titer for use in its particular application. Other applications have not been tested but use in such assays should not necessarily be excluded.

Purification: IgG fraction covalently coupled with high purity Isomer I of fluorescein isothiocyanate. Care is taken to ensure complete removal of any free fluorescein from the final product.

REFERENCES

- Hui, Eric Ka-Wai, et al., (2003), "Conserved cysteine and histidine residues in the putative zinc finger motif of the influenza A virus M1 protein are not critical for influenza virus replication", *Journal of General Virology*, 84, 3105–3113.
- Hui, Eric Ka-Wai, et al., (2004), "Inhibition of influenza virus matrix (M1) protein expression and virus replication by U6 promoter-driven and lentivirus-mediated delivery of siRNA", *Journal of General Virology*, 85, 1877–1884.

BACKGROUND

Introduction: Influenza A virus is a major public health threat. Novel influenza virus strains caused by genetic drift and viral recombination emerge periodically to which humans have little or no immunity, resulting in devastating pandemics. Influenza A can exist in a variety of animals; however it is in birds that all subtypes can be found. These subtypes are classified based on the combination of the virus coat glycoproteins hemagglutinin (HA) and neuraminidase (NA) subtypes.

Keywords: Influenza A Virus M1; Influenza A Virus; Group V ((-)ssRNA); Orthomyxoviridae; FLUAVAH9N2s7gp2; FLUAVs7gp1; M1; M1 matrix protein 1; Matrix Protein 1; Membrane matrix protein M1; Influenza

PACKAGING

Concentration: 4-5mg/ml (OD280nm, $E^{0.1\%} = 1.4$)

Buffer: 0.01M PBS, pH 7.2 containing 10mg/ml BSA.

Preservative: 0.1% Sodium azide

Storage: Short-term (up to 6 months) store at 2–8°C. Long term, aliquot and store at -20°C. Avoid multiple freeze/thaw cycles.

Warning: This product contains sodium azide, which has been classified as Xn (Harmful), in European Directive 67/548/EEC in the concentration range of 0.1–1.0%. When disposing of this reagent through lead or copper plumbing, flush with copious volumes of water to prevent azide build-up in drains.