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# Rabbit Anti-Influenza A Nonstructural Protein 1 antibody

SL16646R



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| **Product Name:** | Influenza A Nonstructural Protein 1 |
| **Chinese Name:** | A型流感病毒非结构蛋白1抗体 |
| **Alias:** | Nonstructural protein 1; NS1; NS1_I97A1; NS1A. |
| **Organism Species:** | Rabbit |
| **Clonality:** | Polyclonal |
| **React Species:** | Influenza A |
| **Applications:** | WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500（Paraffin sections need antigen repair）<br>not yet tested in other applications.<br>optimal dilutions/concentrations should be determined by the end user. |
| **Molecular weight:** | 26kDa |
| **Cellular localization:** | The nucleuscytoplasmic |
| **Form:** | Lyophilized or Liquid |
| **Concentration:** | 1mg/ml |
| **immunogen:** | KLH conjugated synthetic peptide derived from human Influenza A Nonstructural Protein 1:41-140/230 |
| **Lsotype:** | IgG |
| **Purification:** | affinity purified by Protein A |
| **Storage Buffer:** | 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol. |
| **Storage:** | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C. |
| **PubMed:** | PubMed |
| **Product Detail:** | Influenza A virus is a major public health threat, killing more than 30,000 people per year in the USA. The virus has one of sixteen possible hemagglutinin (HA) surface proteins and one of nine possible neuraminidase (NA) surface proteins. In early 2009, a novel H1N1 swine-origin influenza (S-OIV) A virus was identified in specimens |

obtained from patients in Mexico and the United States. The genetic make-up of this swine flu virus is unlike any other: it is an H1N1 strain that combines a triple assortment first identified in 1998 including human, swine, and avian influenza with two new pig H3N2 virus genes from Eurasia, themselves of recent human origin. One of the less studied proteins encoded by, but not incorporated in, the influenza virus is the nonstructural protein (NS) 1. NS1 counters cellular antiviral activities and acts as a virulence factor. It can bind to double-stranded RNA and sequester it from 2'-5' OAS, preventing the activation of the RNAse L, which normally acts to degrade RNA and prevent virus replication. NS1 also binds to and inhibits the antiviral protein kinase PKR.

**Function:**
Prevents the establishment of the cellular antiviral state by inhibiting TRIM25-mediated DDX58 ubiquitination, which normally triggers the antiviral transduction signal that leads to the activation of type I IFN genes by transcription factors like IRF3 and IRF7. Prevents human EIF2AK2/PKR activation, either by binding double-strand RNA, or by interacting directly with EIF2AK2/PKR. This function may be important at the very beginning of the infection, when NS1 is mainly present in the cytoplasm. Also binds poly(A) and U6 snRNA. Suppresses the RNA silencing-based antiviral response in Drosophila cells (By similarity).

**Subunit:**
Homodimer. Interacts with host TRIM25 (via coiled coil); this interaction specifically inhibits TRIM25 multimerization and TRIM25-mediated DDX58 CARD ubiquitination. Interacts with human EIF2AK2/PKR, CPSF4, IVNS1ABP and PABPN1 (By similarity).

**Subcellular Location:**
Host nucleus. Host cytoplasm. Note=In uninfected, transfected cells, NS1 is localized in the nucleus. Only in virus infected cells, the nuclear export signal is unveiled, presumably by a viral protein, and a fraction of NS1 is exported in the cytoplasm.

**Similarity:**
Belongs to the influenza A viruses NS1 family.

**Database links:**
SwissProt: P03496 Influenza A

**Important Note:**
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.