

# OAS1 Antibody (internal region, near C-Term)

Peptide-affinity purified goat antibody Catalog # AF4075a

### **Specification**

### OAS1 Antibody (internal region, near C-Term) - Product Information

Application WB
Primary Accession P00973

Other Accession <u>NP\_058132.2</u>, <u>4938</u>

Reactivity
Host
Clonality
Concentration
Goat
Concentration

Isotype IgG
Calculated MW 46029

## OAS1 Antibody (internal region, near C-Term) - Additional Information

#### **Gene ID 4938**

#### **Other Names**

2'-5'-oligoadenylate synthase 1, (2-5')oligo(A) synthase 1, 2-5A synthase 1, 2.7.7.84, E18/E16, p46/p42 OAS, OAS1, OIAS

#### **Format**

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

### **Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

OAS1 Antibody (internal region, near C-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

## OAS1 Antibody (internal region, near C-Term) - Protein Information

#### Name OAS1

### **Synonyms OIAS**

#### **Function**

Interferon-induced, dsRNA-activated antiviral enzyme which plays a critical role in cellular innate antiviral response (PubMed:<a href="http://www.uniprot.org/citations/34581622" target="\_blank">34581622</a>). In addition, it may also play a role in other cellular processes such as apoptosis, cell growth, differentiation and gene regulation. Synthesizes higher oligomers of 2'-5'-oligoadenylates (2-5A) from ATP which then bind to the inactive monomeric form of



ribonuclease L (RNase L) leading to its dimerization and subsequent activation. Activation of RNase L leads to degradation of cellular as well as viral RNA, resulting in the inhibition of protein synthesis, thus terminating viral replication (PubMed:<a

href="http://www.uniprot.org/citations/34581622" target="\_blank">34581622</a>, PubMed:<a href="http://www.uniprot.org/citations/34145065" target="\_blank">34145065</a>). Can mediate the antiviral effect via the classical RNase L-dependent pathway or an alternative antiviral pathway independent of RNase L. The secreted form displays antiviral effect against vesicular stomatitis virus (VSV), herpes simplex virus type 2 (HSV-2), and encephalomyocarditis virus (EMCV) and stimulates the alternative antiviral pathway independent of RNase L.

#### **Cellular Location**

Cytoplasm. Mitochondrion. Nucleus. Microsome Endoplasmic reticulum. Secreted {ECO:0000250|UniProtKB:Q29599}. Note=Associated with different subcellular fractions such as mitochondrial, nuclear, and rough/smooth microsomal fractions. [Isoform p42]: Note=(Microbial infection) In SARS coronavirus-2/SARS-CoV-2 infected cells, since its not prenylated, is diffusely localized and unable to initiate a detectable block to SARS- CoV-2 replication.

#### **Tissue Location**

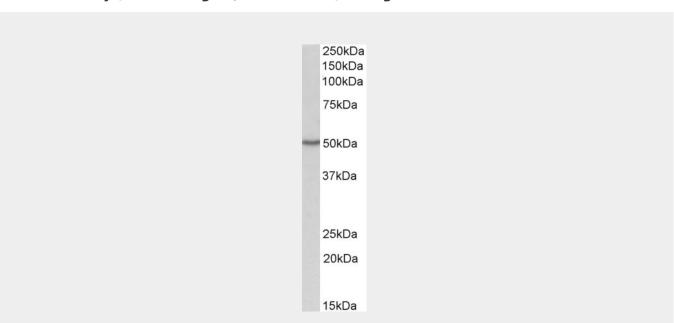
Expressed in lungs..

#### OAS1 Antibody (internal region, near C-Term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## OAS1 Antibody (internal region, near C-Term) - Images



AF4075a (1  $\mu$ g/ml) staining of HepG2 lysate (35  $\mu$ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



# OAS1 Antibody (internal region, near C-Term) - Background

This antibody is expected to recognize isoforms 1 (NP\_058132.2) only.

## OAS1 Antibody (internal region, near C-Term) - References

Polymorphism of OAS-1 determines liver fibrosis progression in hepatitis C by reduced ability to inhibit viral replication. Li CZ, Kato N, Chang JH, Muroyama R, Shao RX, Dharel N, Sermsathanasawadi R, Kawabe T, Omata M. Liver international: official journal of the International Association for the Study of the Liver 2009 Oct 29 (9): 1413-21. PMID: 19515215