

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	NP_058132.2 , 4938
Reactivity	Human
Host	Goat
Clonality	Polyclonal
Concentration	0.5 mg/ml
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: <http://www.uniprot.org/citations/34581622> target="_blank">34581622). 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:34145065, PubMed:34581622). 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

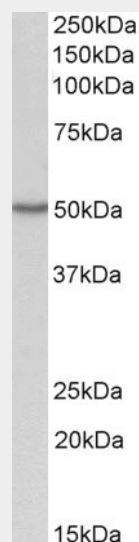
Expressed in lungs..

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](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

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



AF4075a (1 µg/ml) staining of HepG2 lysate (35 µg 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, Sermathanasawadi 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