

Product datasheet

info@arigobio.com

ARG40523 anti-OAS1 antibody

Package: 100 μl Store at: -20°C

Summary

Product Description Rabbit Polyclonal antibody recognizes OAS1

Tested Reactivity Hu, Ms

Tested Application WB

Host Rabbit

Clonality Polyclonal

Isotype IgG

Target Name OAS1

Species Human

Immunogen Recombinant fusion protein corresponding to aa. 1-364 of Human OAS1 (NP_002525.2).

Conjugation Un-conjugated

Alternate Names A; OIASI; p46/p42 OAS; E18/E16; 2-5'; OIAS; IFI-4; EC 2.7.7.84; 2-5A synthase 1; 2'-5'-oligoadenylate

synthase 1

Application Instructions

Application table	Application	Dilution
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	Mouse liver	
Observed Size	40 kDa	

Properties

Form Liquid

Purification Affinity purified.

Buffer PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.

Preservative 0.02% Sodium azide

Stabilizer 50% Glycerol

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol

OAS1

Gene Full Name

2'-5'-oligoadenylate synthetase 1, 40/46kDa

Background

This gene encodes a member of the 2-5A synthetase family, essential proteins involved in the innate immune response to viral infection. The encoded protein is induced by interferons and uses adenosine triphosphate in 2'-specific nucleotidyl transfer reactions to synthesize 2',5'-oligoadenylates (2-5As). These molecules activate latent RNase L, which results in viral RNA degradation and the inhibition of viral replication. The three known members of this gene family are located in a cluster on chromosome 12. Mutations in this gene have been associated with host susceptibility to viral infection. Alternatively spliced transcript variants encoding different isoforms have been described. [provided by RefSeq, Jul 2008]

Function

Interferon-induced, dsRNA-activated antiviral enzyme which plays a critical role in cellular innate antiviral response. 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. 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. [UniProt]

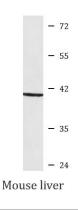
Calculated Mw

46 kDa

Cellular Localization

Cytoplasm. Mitochondrion. Nucleus. Microsome. Endoplasmic reticulum. Secreted. Note=Associated with different subcellular fractions such as mitochondrial, nuclear, and rough/smooth microsomal fractions. [UniProt]

Images



ARG40523 anti-OAS1 antibody WB image

Western blot: 25 μg of Mouse liver lysate stained with ARG40523 anti-OAS1 antibody at 1:1000 dilution.