10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

OAS2 Rabbit pAb

Catalog # AP99612

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	P29728
Other Accession	P29728
Reactivity	Mouse
Predicted	Pig, Human, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	82431
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human OAS2
Epitope Specificity	401-500/719
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the 2-5A synthase family.
SUBUNIT	Homodimer.
Post-translational modifications	Myristoylation is not essential for its activity.Glycosylated. Glycosylation is essential for its activity.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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. Alternatively spliced transcript variants encoding different isoforms have been described. [provided by RefSeq, Jul 2008].

Additional Information

Gene ID	4939
Other Names	Oasl11; OAS2_HUMAN; OAS2; (2-5')oligo(A) synthase 2; 2-5A synthase 2; p69 OAS / p71 OAS (p69OAS / p71OAS); 2.7.7.84; OAS2_MOUSE; 2', 5'-oligoadenylate synthetase-like 11; 2'-5'-oligoadenylate synthetase 2; 2'-5'-oligoadenylate synthetase 2 (69-71 kD); 2'-5'-oligoadenylate synthetase 2, 69/71kDa
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500

Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

Protein Information

Name	OAS2 (HGNC:8087)
Function	Interferon-induced, dsRNA-activated antiviral enzyme which plays a critical role in cellular innate antiviral response (PubMed:10464285, PubMed:9880569). Activated by detection of double stranded RNA (dsRNA): catalyzes the formation of 2'-5'-oligoadenylates (2-5A) from polymerization of ATP which then bind to the inactive monomeric form of ribonuclease L (RNASEL) leading to its dimerization and subsequent activation (PubMed:10464285, PubMed:11682059, PubMed:9880569, PubMed:40412389). Activation of RNASEL leads to degradation of cellular as well as viral RNA, resulting in the inhibition of protein synthesis, thus terminating viral replication (PubMed:10464285, PubMed:9880569). Can mediate the antiviral effect via the classical RNASEL-dependent pathway or an alternative antiviral pathway independent of RNASEL (PubMed:21142819). In addition, it may also play a role in other cellular processes such as apoptosis, cell growth, differentiation and gene regulation (PubMed:21142819). May act as a negative regulator of lactation, stopping lactation in virally infected mammary gland lobules, thereby preventing transmission of viruses to neonates (By similarity). Non-infected lobules would not be affected, allowing efficient pup feeding during infection (By similarity).
Cellular Location	Cytoplasm. Cytoplasm, perinuclear region. Golgi apparatus membrane

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.