



Rabbit Anti-OAS2 antibody

SL15588R

Product Name:	OAS2
Chinese Name:	2'-5'-寡腺苷酸合成酶2抗体
Alias:	(2-5')oligo(A) synthase 2; (2-5')oligo(A) synthetase 2; 2''-5''-oligoadenylate synthase 2; 2'-5'-oligoadenylate synthetase 2; 2'-5'-oligoadenylate synthetase 2, 69/71kDa; 2-5A synthase 2; 2-5A synthetase 2; MGC78578; OAS2; OAS2_HUMAN; p69 OAS / p71 OAS; p69OAS / p71OAS.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Dog,Pig,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	82kDa
Cellular localization:	The nucleuscytoplasmic Mitochondrion
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human OAS2:401-500/719
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:	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].

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. [CATALYTIC ACTIVITY] 3 ATP = pppA2'p5'A2'p5'A + 2 diphosphate.

Subunit:

Homodimer.

Subcellular Location:

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

Post-translational modifications:

Myristoylation is not essential for its activity.
Glycosylated. Glycosylation is essential for its activity.

Similarity:

Belongs to the 2-5A synthase family.

SWISS:

P29728

Gene ID:

4939

Database links:

[Entrez Gene: 4939](#)Human

[Entrez Gene: 246728](#)Mouse

[Omim: 603350](#)Human

[SwissProt: P29728](#)Human

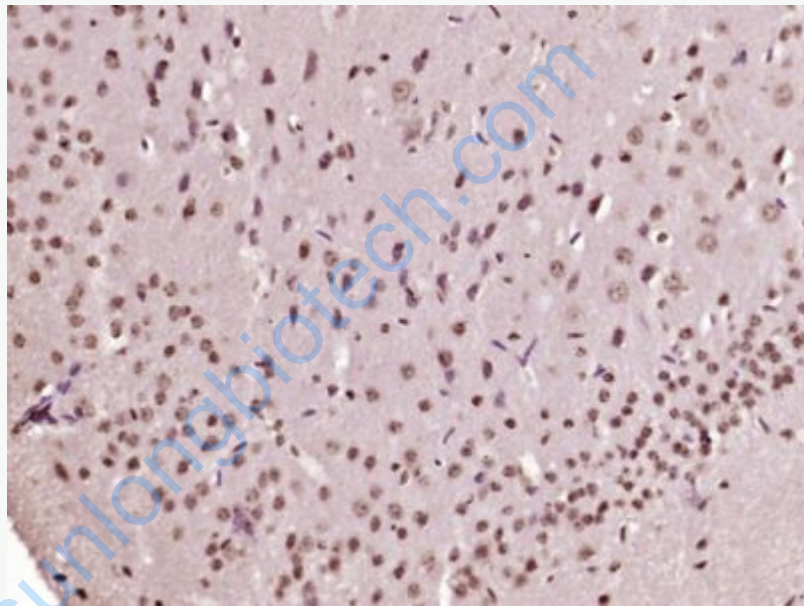
[SwissProt: E9Q9A9](#)Mouse

[Unigene: 414332](#)Human

[Unigene: 260926](#)Mouse

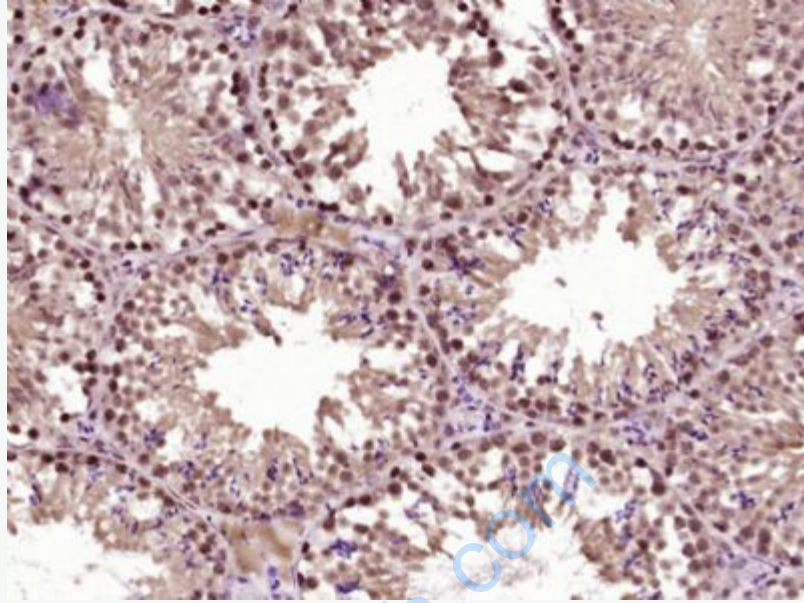
Important Note:

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



Picture:

Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (OAS2) Polyclonal Antibody, Unconjugated (SL15588R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Mouse testis); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (OAS2) Polyclonal Antibody, Unconjugated (SL15588R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.