

OAS2 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP6227a**Specification**

OAS2 Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [P29728](#)**OAS2 Antibody (C-term) Blocking Peptide - Additional Information**

Gene ID 4939

Other Names

2'-5'-oligoadenylate synthase 2, (2-5')oligo(A) synthase 2, 2-5A synthase 2, p69 OAS / p71 OAS, p69OAS / p71OAS, OAS2

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP6227a](/product/products/AP6227a) was selected from the C-term region of human OAS2. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

OAS2 Antibody (C-term) Blocking Peptide - Protein InformationName OAS2 ([HGNC:8087](#))**Function**

Interferon-induced, dsRNA-activated antiviral enzyme which plays a critical role in cellular innate antiviral response (PubMed: [10464285](http://www.uniprot.org/citations/10464285), PubMed: [9880569](http://www.uniprot.org/citations/9880569)). Activated by detection of double stranded RNA (dsRNA); polymerizes higher oligomers of 2'-5'- oligoadenylates (2-5A) from ATP which then bind to the inactive monomeric form of ribonuclease L (RNASEL) leading to its dimerization and subsequent activation (PubMed: [10464285](http://www.uniprot.org/citations/10464285), PubMed: [11682059](http://www.uniprot.org/citations/11682059), PubMed: [9880569](http://www.uniprot.org/citations/9880569)). 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

OAS2 Antibody (C-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

OAS2 Antibody (C-term) Blocking Peptide - Images

OAS2 Antibody (C-term) Blocking Peptide - Background

OAS2 is an enzyme included in the 2', 5' oligoadenylate synthase family. This enzyme is induced by interferons and catalyzes the 2', 5' oligomers of adenosine in order to bind and activate RNase L. This enzyme family plays a significant role in the inhibition of cellular protein synthesis and viral infection resistance.

OAS2 Antibody (C-term) Blocking Peptide - References

Hovnanian, A., et al., Genomics 52(3):267-277 (1998).Marie, I., et al., J. Biol. Chem. 267(14):9933-9939 (1992).Marie, I., et al., J. Biol. Chem. 265(30):18601-18607 (1990).Marie, I., et al., Biochem. Biophys. Res. Commun. 160(2):580-587 (1989).Hovanessian, A.G., et al., EMBO J. 6(5):1273-1280 (1987).