

OAS3 Antibody (C-term) Blocking Peptide Synthetic peptide

Catalog # BP6228a

Specification

OAS3 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

<u>Q9Y6K5</u>

OAS3 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 4940

Other Names

2'-5'-oligoadenylate synthase 3, (2-5')oligo(A) synthase 3, 2-5A synthase 3, p100 OAS, p100OAS, OAS3

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP6228a was selected from the C-term region of human OAS3 . 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.

OAS3 Antibody (C-term) Blocking Peptide - Protein Information

Name OAS3

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 preferentially dimers 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. Displays antiviral activity against Chikungunya virus (CHIKV), Dengue virus, Sindbis virus (SINV) and Semliki forest virus (SFV).



Cellular Location Cytoplasm. Nucleus.

Tissue Location Present at high level in placenta trophoblast.

OAS3 Antibody (C-term) Blocking Peptide - Protocols

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

Blocking Peptides

OAS3 Antibody (C-term) Blocking Peptide - Images

OAS3 Antibody (C-term) Blocking Peptide - Background

OAS3 is an interferon inducible protein that belongs to the 2-5A synthetase family, may play a role in mediating resistance to virus infection, control of cell growth, differentiation, and apoptosis. OAS3 synthesizes preferentially dimeric 2',5'-oligoadenylate molecules. GTP can be an alternative substrate. OAS3 binds double-stranded RNA and polymerizes ATP into PPP(A2'P5'A)N oligomers, which activate the latent RNase L that, when activated, cleaves single-stranded RNAs. The protein is present at high level in placenta trophoblast.

OAS3 Antibody (C-term) Blocking Peptide - References

Ito, M., et al., Cancer Res. 61(5):2038-2046 (2001).Rebouillat, D., et al., Genomics 70(2):232-240 (2000).Rebouillat, D., et al., J. Biol. Chem. 274(3):1557-1565 (1999).