

OAS3 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6228a

Specification

OAS3 Antibody (C-term) - Product Information

Application	WB,E
Primary Accession	<u>Q9Y6K5</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	1056-1087

OAS3 Antibody (C-term) - 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

This OAS3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1056-1087 amino acids from the C-terminal region of human OAS3.

Dilution WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions OAS3 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

OAS3 Antibody (C-term) - 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) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

OAS3 Antibody (C-term) - Images



The anti-OAS3 C-term Antibody (Cat.#AP6228a) is used in Western blot to detect OAS3 in A375 lysate.

OAS3 Antibody (C-term) - 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) - 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). OAS3 Antibody (C-term) - Citations

• The 2\'-5\' oligoadenylate synthetase 3 (OAS3) enzyme potently synthesizes the 2\'-5\' oligoadenylates required for RNase L activation.