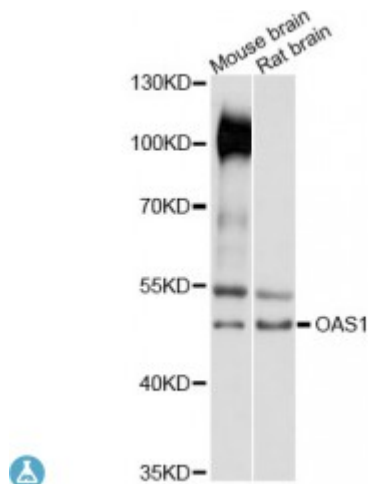


Anti-OAS1 Antibody



Description

This gene is induced by interferons and encodes a protein that synthesizes 2',5'-oligoadenylates (2-5As). This protein activates latent RNase L, which results in viral RNA degradation and the inhibition of viral replication. Alternative splicing results in multiple transcript variants with different enzymatic activities. Polymorphisms in this gene have been associated with susceptibility to viral infection and diabetes mellitus, type 1. A disease-associated allele in a splice acceptor site influences the production of the p46 splice isoform. This gene is located in a cluster of related genes on chromosome 12.

Model	STJ116830
Host	Rabbit
Reactivity	Mouse, Rat
Applications	WB
Immunogen	A synthetic peptide corresponding to a sequence within amino acids 1-100 of human OAS1 (NP_002525.2).
Gene ID	4938
Gene Symbol	OAS1
Dilution range	WB 1:500 - 1:2000
Purification	Affinity purification
Note	For Research Use Only (RUO).
Protein Name	2'-5'-oligoadenylate synthase 1 (2-5' oligo(A synthase 1 2-5A synthase 1
Molecular Weight	46.029 kDa

Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Storage Instruction	Store at -20C. Avoid freeze / thaw cycles.
Database Links	HGNC:8086 OMIM:164350 Reactome:R-HSA-877300
Alternative Names	2'-5'-oligoadenylate synthase 1 (2-5' oligo(A synthase 1 2-5A synthase 1
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, The secreted form displays antiviral effect against vesicular stomatitis virus (VSV), herpes simplex virus type 2 (HSV-2), and encephalomyocarditis virus (EMCV) and stimulates the alternative antiviral pathway independent of RNase L,
Cellular Localization	Cytoplasm