

Oas1a (E-12): sc-49835

BACKGROUND

The 2', 5'- oligoadenylate synthetases (OASs) are interferon-induced proteins that play a putative role in mediating resistance to virus infection, control of cell growth, differentiation and apoptosis. OAS1, which functions as a homotetramer, is characterized by its capacity to catalyze the synthesis of 2', 5'- oligomers of adenosine (2-5As). OAS1 binds double-stranded RNA and polymerizes ATP into PPP(A2'P5'A)N oligomers, activating latent RNase L which, when activated, cleaves single-stranded RNAs. This RNase L activity leads to the inhibition of cellular protein synthesis and the impairment of viral replication. OAS1, a 400 amino acid containing protein, is also important in evaluating the interferon response in RNAi studies, and is implicated in diabetes mellitus susceptibility. Oas1a is one of the known rodent homologs of human OAS1, which are thought to mediate cell growth, differentiation and apoptosis, as well as host resistance to viral infection.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Oas1a (mouse) mapping to 5 F.

SOURCE

Oas1a (E-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Oas1a of mouse origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-49835 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Oas1a (E-12) is recommended for detection of Oas1a of mouse origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Oas1a siRNA (m): sc-150140, Oas1a shRNA Plasmid (m): sc-150140-SH and Oas1a shRNA (m) Lentiviral Particles: sc-150140-V.

Oas1a (E-12) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Oas1a: 46 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.



Try **Oas1a (C-5): sc-374252** or **Oas1a (E-2): sc-365072**, our highly recommended monoclonal alternatives to Oas1a (E-12).