# OAS2 (A-15): sc-49851



The Power to Question

#### **BACKGROUND**

The 2'- 5'- oligoadenylate synthetase (OAS) family is comprised of four members: OAS1, OAS2, OAS3 and OASL. These proteins are induced by interferons and function to convert ATP into 2'- 5'- linked oligomers of adenosine in the presence of double-stranded RNA and magnesium ions. Copper, iron and zinc ions strongly inhibit the OAS enzymatic activity, while manganese ions can replace magnesium ions as an activator. The OAS family plays a significant role in the inhibition of cellular protein synthesis as well as in viral infection resistance. OAS2, which represents the "medium form" in the OAS family, maps to human chromosome 12q24. OAS2 contains two OAS1-homologous domains separated by a proline-rich putative linker region. It is functionally active as a dimer. Abnormal expression patterns of OAS2 may be linked to infection flare in Lupus patients.

## REFERENCES

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#### **CHROMOSOMAL LOCATION**

Genetic locus: OAS2 (human) mapping to 12q24.2; Oas2 (mouse) mapping to 5 F.

#### **SOURCE**

OAS2 (A-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of OAS2 of rat origin.

#### **PRODUCT**

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

Blocking peptide available for competition studies, sc-49851 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for gel supershift and ChIP applications, sc-49851 X, 200  $\mu g/0.1$  ml.

#### **APPLICATIONS**

OAS2 (A-15) is recommended for detection of OAS2 of rat 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).

OAS2 (A-15) X TransCruz antibody is recommended for gel supershift and ChIP applications.

Molecular Weight of OAS2: 69 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.

#### **PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

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