

## **OAS2 Polyclonal Antibody**

Catalog # AP73719

## **Specification**

## **OAS2 Polyclonal Antibody - Product Information**

Application WB
Primary Accession P29728
Reactivity Human
Host Rabbit
Clonality Polyclonal

# **OAS2 Polyclonal Antibody - Additional Information**

**Gene ID** 4939

### **Other Names**

OAS2; 2'-5'-oligoadenylate synthase 2; (2-5')oligo(A) synthase 2; 2-5A synthase 2; p69 OAS / p71 OAS; p69OAS / p71OAS

#### **Dilution**

WB $\sim\sim$ Western Blot: 1/500 - 1/2000. IHC-p: 1:100-1:300. ELISA: 1/20000. Not yet tested in other applications.

#### **Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

### **Storage Conditions**

-20°C

### **OAS2 Polyclonal Antibody - Protein Information**

#### Name OAS2 (HGNC:8087)

# **Function**

Interferon-induced, dsRNA-activated antiviral enzyme which plays a critical role in cellular innate antiviral response (PubMed:<a href="http://www.uniprot.org/citations/10464285" target="\_blank">10464285</a>, PubMed:<a href="http://www.uniprot.org/citations/9880569" target="\_blank">9880569</a>). Activated by detection of double stranded RNA (dsRNA): polymerizes higher oligomers of 2'-5'- oligoadenylates (2-5A) from ATP which then bind to the inactive monomeric form of ribonuclease L (RNASEL) leading to its dimerization and subsequent activation (PubMed:<a href="http://www.uniprot.org/citations/10464285" target="\_blank">10464285</a>, PubMed:<a href="http://www.uniprot.org/citations/9880569" target="\_blank">10464285</a>, PubMed:<a href="http://www.uniprot.org/citations/11682059" target="\_blank">10464285</a>, PubMed:<a href="http://www.uniprot.org/citations/10464285" target="\_blank">10464285</a>, PubMed:<a href="http://www.uniprot.org/citations/10464285" target="\_blank">10464285</a>, PubMed:<a href="http://www.uniprot.org/citations/10464285" target="\_blank">10464285</a>, PubMed:<a href="http://www.uniprot.org/citations/9880569" target="\_blank">1046428





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antiviral pathway independent of RNASEL (PubMed: <a

href="http://www.uniprot.org/citations/21142819" target=" blank">21142819</a>). In addition, it may also play a role in other cellular processes such as apoptosis, cell growth, differentiation and gene regulation (PubMed: <a href="http://www.uniprot.org/citations/21142819" target=" blank">21142819</a>). May act as a negative regulator of lactation, stopping lactation in virally infected mammary gland lobules, thereby preventing transmission of viruses to neonates (By similarity). Non-infected lobules would not be affected, allowing efficient pup feeding during infection (By similarity).

### **Cellular Location**

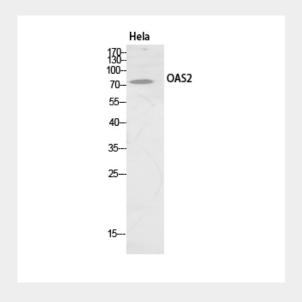
Cytoplasm. Cytoplasm, perinuclear region

# **OAS2 Polyclonal Antibody - Protocols**

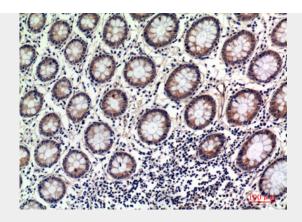
Provided below are standard protocols that you may find useful for product applications.

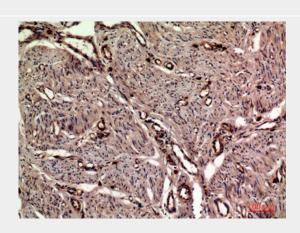
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

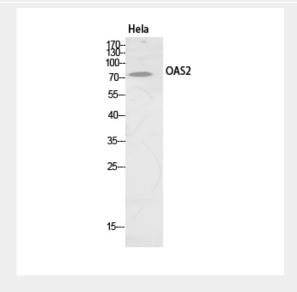
# OAS2 Polyclonal Antibody - Images



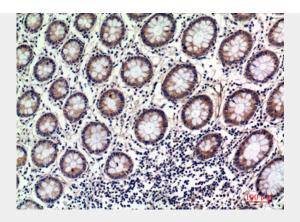


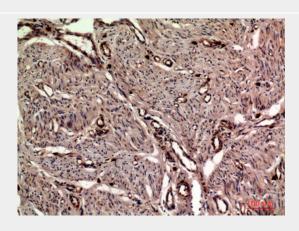












### **OAS2 Polyclonal Antibody - Background**

Interferon-induced, dsRNA-activated antiviral enzyme which plays a critical role in cellular innate antiviral response (PubMed:10464285, PubMed:9880569). Activated by detection of double stranded RNA (dsRNA): polymerizes higher oligomers of 2'- 5'-oligoadenylates (2-5A) from ATP which then bind to the inactive monomeric form of ribonuclease L (RNASEL) leading to its dimerization and subsequent activation (PubMed:10464285, PubMed:9880569, PubMed:11682059). Activation of RNASEL leads to degradation of cellular as well as viral RNA, resulting in the inhibition of protein synthesis, thus terminating viral replication (PubMed:10464285, PubMed:9880569). Can mediate the antiviral effect via the classical RNASEL-dependent pathway or an alternative antiviral pathway independent of RNASEL (PubMed:21142819). In addition, it may also play a role in other cellular processes such as apoptosis, cell growth, differentiation and gene regulation (PubMed:21142819). May act as a negative regulator of lactation, stopping lactation in virally infected mammary gland lobules, thereby preventing transmission of viruses to neonates (By similarity). Non-infected lobules would not be affected, allowing efficient pup feeding during infection (By similarity).