

# Recombinant Human 2,5-oligoadenylate Synthetase 1, 40/46kDa

**Cat. No.** OAS1-378H    **Lot. No.** (See product label)

## SPECIFICATION

### Product Overview

Recombinant Human OAS1 protein was expressed in *E.coli* and purified by using conventional chromatography techniques. MW = 43.9 kDa (384aa).

### Species

Human

### Source

*E.coli*

### Description

OAS1 is an enzyme included in the 2',5'-oligoadenylate synthase family. This enzyme is induced by interferons and uses adenosine triphosphate in 2'-specific nucleotidyl transfer reactions to synthesize 2',5'-oligoadenylates(2-5As). These molecules activate latent RNase L, which results in viral RNA degradation and the inhibition of viral replication. OAS1 may play a role in mediating resistance to virus infection, control of cell growth, differentiation, and apoptosis.

### Amino Acid Sequence

MGSSHHHHH SSSLVPRGSH MMDLRNTPAK SLDKFIEDYL LPDTCFRMQI  
 NHAIDIICGF LKERCFRGSS YPVCVSKVVK GGSSGKGTTL RGRSDADLVV  
 FLSPLTTFQD QLNRRGEFIQ EIRRQLEACQ RERAFSVKFE VQAPRWGNPR  
 ALSFVLSSLQ LGEGVEFDVL PAFDALGQLT GSYKPNPQIY VKLIEECTDL  
 QKEGEFSTCF TELQRDFLKQ RPTKLKSLIR LVKHWYQNCK KKLGLKPPQY  
 ALELLTVYAW ERGSMKTHFN TAQGFRTVLE LVINYQQLCI YWTKYYDFKN  
 PIIEKYLRRQ LTKPRPVILD PADPTGNLGG GDPKGWRQLA QEAEAWLNYP  
 CFKNWDGSPV SSWILLVRPP ASSLPFIPAP LHEA

 Tel: 1-631-559-9269    1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

|                        |   |
|------------------------|---|
| <b>Form</b>            | Liquid. In 20mM Tris-HCl buffer(pH 8.0) containing 10% glycerol and 1mM DTT.  |
| <b>Purity</b>          | > 95% by SDS – PAGE.  |
| <b>Concentration</b>   | 1 mg/ml (determined by Bradford assay).   |
| <b>Endotoxin Level</b> | < 1.0 EU per 1 µg of protein (determined by LAL method ).   |
| <b>Storage</b>         | Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles. |

## GENE INFORMATION

|                       |   |
|-----------------------|---|
| <b>Gene Name</b>      | OAS1 2",5"-oligoadenylate synthetase 1, 40/46kDa [ Homo sapiens ]   |
| <b>Synonyms</b>       | OAS1; 2",5"-oligoadenylate synthetase 1, 40/46kDa; OIAS; IFI-4; OIASI; 2",5"-oligoadenylate synthetase 1; 2-5A synthetase 1; 2",5"-oligo A synthetase 1; 2"-5"-oligoisoadenylate synthetase 1; 2"-5" oligoadenylate synthetase 1 p48 isoform; 2"-5" oligoadenylate synthetase 1 p52 isoform; EC 2.7.7.-; p46/p42 OAS; E18/E16; OIAS |
| <b>Gene ID</b>        | 4938  |
| <b>mRNA Refseq</b>    | NM_001032409  |
| <b>Protein Refseq</b> | NP_001027581  |
| <b>MIM</b>            | 164350  |
| <b>UniProt ID</b>     | P00973  |
| <b>Chromosome</b>     | 12q24.2   |

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA



**Location**

**Function**

ATP binding; RNA binding; nucleotide binding; nucleotidyltransferase activity; transferase activity

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA