

# Recombinant human OAS1 protein

Catalog Number: ATGP0375

## PRODUCT INFORMATION

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### Expression system

E.coli

### Domain

1-364aa

### UniProt No.

P00973

### NCBI Accession No.

NP\_002525.2

### Alternative Names

2'5'-oligoadenylate synthetase 1 isoform2, IFI-4, OIAS, OIASI, 2',5'-oligoadenylate synthetase 1, isoform2 (2'5')oligo(A) synthetase 1, 2' 5' oligo A synthetase 1, 2 5 Oligoadenylate Synthetase 1, 2 5A synthetase 1, 2' 5' oligoadenylate synthetase 1, 2' 5' oligoisoadenylate synthetase 1, 2'5' oligoadenylate synthetase 1, 2'5' oligoisoadenylate synthetase 1, p46/p42 OAS, 2'5' oligo A synthetase 1, E18/E16, IFI 4, IFI4, OAS 1,

## PRODUCT SPECIFICATION

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### Molecular Weight

43.9 kDa (384aa) confirmed by MALDI-TOF

### Concentration

1mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol and 1mM DTT

### Purity

> 95% by SDS-PAGE

### Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

### Tag

His-Tag

### Application

SDS-PAGE

### Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

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### Description

OAS1 is an enzyme included in the 2', 5'-oligoadenylate synthase family. This enzyme is induced by interferons

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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. Recombinant OAS1 protein was expressed in *E. coli* and purified by using conventional chromatography techniques.

## Amino acid Sequence

<MGSSHHHHHH SSGLVPRGSH> MMDLRNTPAK SLDKFIEDYL LPDTCFRMQI NHAIDIICGF LKERCFRGSS YPVCVSKVVK  
GGSSGKGTTL RGRSDADLVV FLSPLTTFQD QLNRRGEFIQ EIRRQLEACQ RERAFSVKFE VQAPRWGNPR ALSFVLSLQ  
LGEGVEFDVL PAFDALGQLT GSYKPNPQIY VKLIEECTDL QKEGEFSTCF TELQRDFLKQ RPTKLKSLIR LVKHWHYQNCK  
KKLGKLPQY ALELLTVYAW ERGSMKTHFN TAQGFRTVLE LVINYQQLCI YWTKYYDFKN PIIEKYLRRQ LTKPRPVILD  
PADPTGNLGG GDPKGWRQLA QEAEAWLNYP CFKNWDGSPV SSWILLVRPP ASSLPFIPAP LHEA

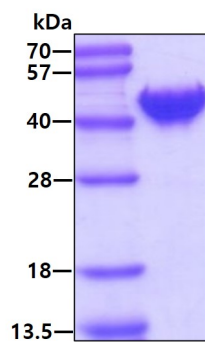
## General References

Rios JJ., et al. (2007) BMC Genomics. 8:313.

Tessier MC., et al. (2006) J Med Genet. 43(2):129-32.

## DATA

### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.