

Active Recombinant Human USP19, GST-tagged

Cat. No. USP19-186H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human USP19 (amino acid residues 1-1290), fused with N-terminal GST, was expressed in E.coli.
Species	Human
Source	E.coli
ProteinLength	1-1290 a.a.
Description	USP19 modulates transcription of major myofibrillar proteins and is involved in decreased protein synthesis in atrophying skeletal muscle. Inhibition of USP19 could be a novel therapeutic mechanism for the prevention and treatment of muscle protein catabolism (Sundaram et al., 2009). During the cell cycle, USP19 regulates p27 levels by deubiquitylating and stabilizing RNF123, an E3 ubiquitin ligase that ubiquitylates p27 and targets it for proteasomal degradation at the G1 phase. Enhanced degradation of p27 in G1 phase is associated with several cancers, and thus USP19 could be a possible target for oncology research (Lu et al., 2009).
Form	50 mM HEPES pH 7.5, 150 mM sodium chloride, 2 mM dithiothreitol, 10% glycerol
Bio-activity	Deubiquitylase Enzyme Assay: The activity of GST-USP19 was validated by determining the increase in fluorescence measured as a result of the enzyme catalysed cleavage of the fluorogenic substrate Ubiquitin-Rhodamine110-Glycine generating Ubiquitin and Rhodamine110-Glycine. Incubation of the substrate in the presence or absence of GST-USP19 was compared confirming the deubiquitylating

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

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

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

activity of GST-USP19.

Molecular Mass ~170 kDa

Purity >79% by SDS-PAGE

Storage 12 months at -70°C. Avoid multiple freeze/thaw cycles.

Concentration 0.5 mg/ml

GENE INFORMATION

Gene Name [USP19 ubiquitin specific peptidase 19 \[Homo sapiens \]](#)

Official Symbol USP19

Synonyms USP19; ubiquitin specific peptidase 19; ubiquitin specific protease 19; ubiquitin carboxyl-terminal hydrolase 19; KIAA0891; ZMYND9; ubiquitin thioesterase 19; deubiquitinating enzyme 19; ubiquitin thiolesterase 19; ubiquitin-specific-processing protease 19; zinc finger MYND domain-containing protein 9;

Gene ID [10869](#)

mRNA Refseq [NM_001199160](#)

Protein Refseq [NP_001186089](#)

MIM [614471](#)

UniProt ID [O94966](#)

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Chromosome Location	3p21.31
Function	cysteine-type peptidase activity; metal ion binding; peptidase activity; protein binding; ubiquitin thiolesterase activity; ubiquitin-specific protease activity; zinc ion binding;

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