

Active Recombinant Human USP2, GST-tagged

Cat. No. USP2-182H Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant human USP2, isoform 4 (amino acid residues 1-396), fused with N-terminal GST, was expressed in E.coli.
Species	Human
Source	E.coli
ProteinLength	1-396 a.a.
Description	USP2 influences the nuclear translocation of NF- κ B transcription factors in response to inflammation, injury and other environmental changes. In resting cells, NF- κ B is bound to the inhibitory protein I κ B α , and therefore maintained in an inactive state in the cytoplasm. The proteasomal degradation of I κ B α is prevented by USP2 deubiquitylase activity. This regulates the expression of genes that are involved in immune responses, cell proliferation, differentiation and apoptosis (Metzig et al., 2011).
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-USP2 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-USP2 was compared confirming the deubiquitylating

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	activity of GST-USP2.
Molecular Mass	~73 kDa
Purity	>68% by SDS-PAGE
Storage	12 months at -70°C. Avoid multiple freeze/thaw cycles.
Concentration	0.5 mg/ml

GENE INFORMATION

Gene Name	USP2 ubiquitin specific peptidase 2 [Homo sapiens]
Official Symbol	USP2
Synonyms	USP2; ubiquitin specific peptidase 2; ubiquitin specific protease 2; ubiquitin carboxyl-terminal hydrolase 2; UBP41; ubiquitin thioesterase 2; deubiquitinating enzyme 2; ubiquitin specific protease 9; ubiquitin specific protease 12; 41 kDa ubiquitin-specific protease; ubiquitin-specific-processing protease 2; USP9;
Gene ID	9099
mRNA Refseq	NM_001243759
Protein Refseq	NP_001230688
MIM	604725
UniProt ID	O75604

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Chromosome Location	11q23.3
Pathway	TNF-alpha/NF-kB Signaling Pathway, organism-specific biosystem;
Function	cyclin binding; cysteine-type endopeptidase activity; identical protein binding; metal ion binding; peptidase activity; protein binding; ubiquitin protein ligase binding; ubiquitin thiolesterase activity; ubiquitin thiolesterase activity;

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