

Lot # XXXXX

BostonBiochem

MATERIAL DATA SHEET

His₆-USP2_{CD} (UBP41 catalytic domain), *human recombinant* Cat. # E-506

USP2 (Ubiquitin Specific Protease 2) is a cysteine protease over-expressed in prostate cancer, is androgen-regulated and interacts with and prolongs the half-life of fatty acid synthase (FAS). FAS stabilization is associated with the malignancy of a subset of aggressive prostate cancers. Mdm2 is also a substrate for USP2 indicating that the enzyme may regulate p53-dependent pathways. The *in vivo* and *in vitro* oncogenic properties of USP2 are also linked to its deubiquitinating activity. It has been hypothesized that USP2 might stabilize short-lived proteins that accumulate and may act as regulators or effectors in the induction of apoptosis. This recombinant protein contains a C-terminal his-tag and residues 268-605 representing the catalytic domain (CD) of USP2. Accession # NP_004196.

Product Information

Quantity:	50 µg
Stock:	X mg/ml (X µM) in 50 mM HEPES pH 8.0, 150 mM NaCl, 10% glycerol, 0.5 mM EDTA, 1mM DTT. Actual concentration varies with specific Lot #.
MW:	42 kDa
Purity:	> 95% by SDS-PAGE

Use & Storage

Use:	Typical enzyme concentration for use <i>in vitro</i> ranges from 1-5 µM depending on conditions and substrate.
Storage:	Store at -80°C. Avoid multiple freeze/thaw cycles.

Literature

References:	Baek S.H., <i>et al</i> (1997) <u>J.Biol.Chem.</u> 272 :25560-25565 Catanzariti A.M., <i>et al</i> (2003) <u>Canc.Res.</u> 63 :682-688 Graner E., <i>et al</i> (2004) <u>Canc.Cell.</u> 3 :253-261 Kwon-Yul R., <i>et al</i> (2006) <u>Anal.Biochem.</u> 353 :153-155 Nijman S.M.B., <i>et al</i> (2005) <u>Cell.</u> 123 :773-786 Priolo C., <i>et al</i> (2006) <u>Canc.Res.</u> 66 :8625-8632 Renatus M., <i>et al</i> (2006) <u>Structure.</u> 14 :1293-1302 Tirat A., <i>et al</i> (2005) <u>Anal.Biochem.</u> 343 :244-255 Nijman S.M.B., <i>et al</i> (2005) <u>Cell.</u> 123 :773-786 Ventadour S., <i>et al</i> (2007) <u>J.Biol.Chem.</u> 282 :5302-5309
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