

MATERIAL DATA SHEET

His₆-UBP43/USP18, human recombinant Cat. # E- 600

UBP43 has homology to the catalytic domains of ubiquitin-specific proteases (USPs) and is the only deconjugating enzyme identified to date that cleaves the ubiquitin-like protein ISG15 from substrates. The enzyme acts upon ISG15 fusions including native ISG15 conjugates linked via isopeptide bonds. This enzyme is induced by type I interferon (IFN) and UBP43 intracellular levels are regulated transcriptionally and post-translationally via SCFSkp2-mediated ubiquitination and degradation. UBP43 plays an important role in cellular proliferation and differentiation and is necessary to maintain the critical balance of ISG15 conjugated protein in cells. This recombinant protein is N-terminally tagged. Accession # NP_059110.

Product Information

Quantity: 50 µg

Stock: X mg/ml (X µM) in 50 mM HEPES pH 8.0, 50mM NaCl, 5mM DTT, 1mM

EDTA. Actual concentration varies with specific Lot #.

MW: 44 kDa

Purity: > 95% by SDS-PAGE

Use & Storage

Use: Typical enzyme concentration for use in vitro ranges from 1-5 µM depending

on conditions and substrate.

Store at -80°C. Avoid multiple freeze/thaw cycles. Storage:

Literature

Kang D., et al (2001) Gene. 267:233-242 **References:**

Kim K.I and Zhang D.E.. (2005) Meth. Enzymol. 398:491-499

Li X.-L., et al (2000) J.Biol.Chem. 275:8880-8888 Liu L.-Q., et al (1999) Mol.Cell.Biol. 19:3029-3038 Malakhov M.P., et al (2002) J.Biol.Chem. 277:9976-9981 Malakhov M.P., et al. (2006) EMBO. J. 25:2358-2367 Ritchie K.J., et al. (2004) Nat.Med. 10:1374-1378

Schwer H., et al. (2000) Genomics. **65**:44-52

Tokarz S., et al. (2004) J.Biol.Chem. 279:46424-46430

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