

MATERIAL DATA SHEET

Recombinant Human WWP1

Cat. # E3-232

WWP1 belongs to a family of NEDD4-like proteins, which are HECT-class E3 ubiquitin ligase enzymes. Human family members include NEDD4, NEDD4-2, ITCH, SMURF1, SMURF2, WWP1, WWP2, NEDDL1 and NEDDL2. With a predicted molecular weight of 105 kDa, WWP1 is 922 amino acid residues long and is 90% identical to the murine ortholog. WWP1 reportedly ubiquitinates and promotes proteasome-dependent degradation of two c-ErbB-4 isoforms, the transcription factors KLF2 and KLF5, TP63, and a variety of other proteins. WWP1 adopts an autoinhibited structure in which its multiple WW domains sequester the HECT domain. Importantly, mutations in the WW domains of this ligase have been found in certain human cancers and have been shown to derepress WWP1 ligase activity in cell-based and in vitro assays. This recombinant protein contains an N-terminal 2X FLAG tag and amino acids 2-922 (UniProt Q9H0M0)

Product Information

Quantity:	50 µg
MW:	107 kDa
Source:	<i>Trichoplusia ni</i> , <i>T. ni</i> (baculovirus)-derived human WWP1 protein Accession # Q9H0M0 2X FLAG™ tag
Stock:	X mg/ml (X µM) in 50 mM HEPES pH 7.5, 200 mM NaCl, 10% (v/v) Glycerol, 1 mM DTT
Purity:	>85%, by SDS-PAGE under reducing conditions and visualized by Colloidal Coomassie® Blue stain.

Use & Storage

Use: Recombinant Human WWP1 is a Ubiquitin Ligase (E3) that functions downstream of a Ubiquitin-activating (E1) enzyme and a Ubiquitin-conjugating (E2) enzyme to conjugate Ubiquitin to substrate proteins. Reaction conditions will need to be optimized for each specific application.

Storage: Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 48 months from date of receipt, -70 °C as supplied.
- 3 months, -70 °C under sterile conditions after opening.

Literature

References:

1. Komuro A. et al. (2004) *Oncogene* **23**: 6914
2. Seo S.R. et al. (2004) *EMBO J.* **23**: 3780
3. Verdecia M.A. et al. (2003) *Mol. Cell* **11**: 249
4. Wang Z et al. (2019) *Nat. Comm.* **10**: 3162

For research use only. Not for use in humans.