

MATERIAL DATA SHEET

Recombinant Human CYLD 6-His, Isoform 1 Cat. # E-556

Ubiquitin carboxyl-terminal hydrolase CYLD (CYLD) is a 956 amino acid (aa) member of the peptidase C67 protein family with a predicted molecular weight of 107 kDa. The mouse and rat CYLD orthologs share 95% and 94% aa sequence identity with the human protein, respectively. Two isoforms of CYLD have been identified, a full-length isoform and a second isoform that lacks aa 305-307 due to alternative splicing (1). Expression of CYLD has been reported in fetal brain as well as adult brain, heart, leukocytes, skeletal muscle, spleen, and testis (1). CYLD acts as a deubiquitinase and removes K63-linked Ubiquitin chains from multiple substrates including IkB, c-Jun, and c-Fos, resulting in the inhibition of NF-κB and JNK signaling (2-6). In some contexts, CYLD enhances mitosis entry, and it has also been shown to delay G1/S phase entry suggesting that CYLD regulates multiple phases of the cell cycle (7,8). CYLD is recognized as a tumor suppressor and mutations in CYLD result in skin appendage syndromes including Brooke-Spiegle Syndrome, familial cylindromatosis, and familial trichoepitheliomas type 1 (9). This recombinant protein has an N-terminal His₆-tag.

Product Information

Quantity: 50 μg

MW: 108 kDa

Source: Spodoptera frugiperda, Sf 21 (baculovirus)-derived

Contains an N-terminal 6-His tag

Accession # Q9NQC7

Stock: X mg/ml (X μM) in 50 mM HEPES pH 8.0, 200 mM NaCl, 2 mM DTT

Purity: >90%, by SDS-PAGE under reducing conditions and visualized by Colloidal

Coomassie® Blue stain.



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Use & Storage

Use: Recombinant Human His6-CYLD Isoform 1 is a Ubiquitin-specific deconjugating

enzyme. Reaction conditions will need to be optimized for each specific application. We recommend an initial Recombinant Human His6-CYLD Isoform 1 concentration

of 50-500 nM.

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

• 12 months from date of receipt, -70 °C as supplied.

• 3 months, -70 °C under sterile conditions after opening.

Literature

References:

- 1. Bignell, G.R. et al. (2000) Nat. Genet. 25:160.
- 2. Reiley, W. et al. (2004) J. Biol. Chem. 279:55161.
- 3. Miliani de Marval, P. et al. (2011) Cancer Prev. Res. (Phila) 4:851.
- 4. Komander, D. et al. (2008) Mol. Cell 29:451.
- 5. Kovalenko, A. et al. (2003) Nature 424:801.
- 6. Trompouki, E. et al. (2003) Nature **424**:793.
- 7. Wickstrom, S.A. et al. (2010) EMBO J. 29:131.
- 8. Stegmeier, F. et al. (2007) Proc. Natl. Acad. Sci. USA 104:8869.
- 9. Saggar, S. et al. (2008) J. Med. Genet. 45:298.

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