Recombinant Human CUL3/RBX1 Complex His-tag (Neddylated)

Catalog Number: E3-436

DESCRIPTION

Source	*Spodoptera frugiperda*, *Sf* 21 (baculovirus)-derived human CUL3/RBX1 Complex protein Met1 - Ala768 with a N-terminal 10-His tag (CUL3); Met1 - His108 (RBX1) Accession # Q13618.2 (CUL3); P62877.1 (RBX1)
Predicted Molecular Mass	100 kDa (neddylated CUL3), 12 kDa (RBX1)

SPECIFICATIONS

Activity	Typical enzyme concentration to support *in vitro* conjugation will depend on experimental conditions.
Formulation	Supplied as a solution in HEPES, NaCl, DTT and Glycerol. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Shipping	The product is shipped with dry ice or equivalent. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** • 6 months from date of receipt, -70 °C as supplied. • 3 months, -70 °C under sterile conditions after opening.

BACKGROUND

Cullin-3 (CUL3) is a core component of multiple BCR (BTB-CUL3-RBX) E3 Ubiquitin ligase complexes that mediate the ubiquitination of several classes of signaling and structural proteins. In the BCR complex, CUL3 serves as a scaffold that organizes one or more BTB (BR-C, Ttk and Bab, also known as a POZ domain) substrate recognition subunits with the RBX subunit and contributes to catalysis through positioning of the substrate and an E2 ubiquitin-conjugating enzyme. Substrate specificity of a BCR ligase is determined by the BTB domain protein(s) associated with the ligase, though BTB-independent CUL3 ligase activity has been reported. *In vivo*, the E3 ubiquitin ligase of the BCR complex is dependent on neddylation of the cullin subunit, though neddylation may be dispensable for some *in vitro* reactions.

References:

1. Baek, K., *et al.* (2020) Nature **578**:461.
2. Choo, Y.Y. & T. Hagen (2012) PLos One **7**:e41350.
3. Davidge, B., *et al.* (2019) J. Cell Sci. **132**:jcs233049.
4. Duda, D.M., *et al.* (2012) Mol. Cell **47**:371.
5. Stogios, P.J. *et al.* (2005) Genome Biol. **6**:R82.

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