Product Name: CRBN/DDB1

Alternate Names: Cereblon, CRBN (MRX69, AD-006)

Product Code: TE3-015 **Quantity:** 25 µg

FOR RESEARCE USE ONLY (RUO)

Storage:
Use a manual defrost freezer and avoid repeated freeze-thaw cycles. Aliquot and store ≤ -70°C (stable for 24 months from date of receipt).

Verified Applications / Usage
CRBN/DDB1 is active in ternary complex formation assays using recombinant BRD4 and dBET1

Physical Characteristics

Species: Homo sapiens (Human)

Predicted MW (kDa): 53 kDa (CRBN) / 131 kDa (DDB1)

Source: Sf9 (S. frugiperda)

Purity: 95%

Concentration: 5-15 µM

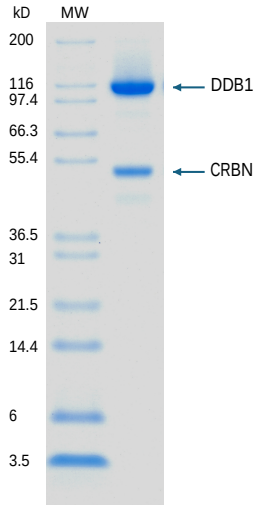
Formulation: 40 mM HEPES, 100 mM NaCl, 10% Glycerol, 1 mM EDTA, 1 mM TCEP, pH 7.6

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. Aliquot and store ≤ -70°C (stable for 24 months from date of receipt).

Quality Assurance

Purity & SDS-PAGE



2 µg DDB1/CRBN run on 4-12% SDS-PAGE gel under reducing conditions, then visualized with Colloidal Coomassie Blue Stain.

Activity Assay

Ternary Complex Assay

Protein ID: DNA damage-binding protein 1;Protein cereblon

Background

Description

Cereblon (CRBN) is the substrate-receptor of the CUL4–RING E3 ligase CRL4-CRBN. Recombinant human CRBN is co-purified as a stable heterodimer with its adaptor DDB1, retaining the complete thalidomide-binding CULT pocket and the DDB1-docking helical bundle. When combined with recombinant CUL4A/RBX1, this fusion will ubiquitylate physiological substrates such as MEIS2 in vitro, and other substrates in the presence of IMiDs, CELMoDs or PROTACs. This makes the complex a ready-to-screen platform for (i) high-throughput molecular-glue discovery, (ii) ternary-complex structural studies, and (iii) degrader MoA and selectivity profiling, while the presence of DDB1 improves solution stability for biophysics and cryo-EM work.

Accession Number: Q16531;Q96SW2

Entrez Gene ID: CRBN;DDB1

Protein Sequence

MGHHHHHHHHGSENLYFQSMAGEGDQQDAAHNMGNHLPLLPAESEE
EDEMEVEDQDSKEAKKPNIINFDTSLPTSHTYLGADMEEFHGRTLHDD
DSCQVIPVLPQVMMILIPGQTLPLQLFHPQEVSMVRNLIQKDRTFAVLAY
SNVQEREAQFGTTAEIYAYREEQDFGIEIVKVKAIGRQRFKVLELRTQS
DGIQQAKVQILPECVLPSTMSAVQLESLNKCQIFPSKPVSREDQCSYK
WWQKYQKRKFHCANLTSWPRWLYSLYDAETLMDRIKKQLREWDENL
KDDSLPSNPIDFSYRVAACLPIDDVLRIQLLKIGSAIQRLRCELDIMNKCT
SLCCKQCQETEITTKNEIFSLSLCGPMAAYVNPHGYVHETLTVYKACNL
NLIGRPSTEHSWFPGYAWTVAQCKICASHIGWKFTATKKDMSPQKFW
GLTRSALLPTIPDTEDEISPDKVILCL;MWSHPQFEKGGGSGGGSGGSA
WSHPQFEKGSLEVLFQGPMSYNYVVTAQKPTAVNGCVTGHFTSAEDL
NLLIAKNTRLEIYVVTAEGLRPVKEVGMYGKIAVMELFRPKGESKDLLFIL
TAKYNACILEYKQSGESIDIITRAHGNVQDRIGRPSETGIIGIIDPECRMIG
LRLYDGLFKVIPLDRDNKELKAFNIRLEELHVIDVKFLYGCQAPTICFVYQ
DPQGRHVKTYEVSLREKEFNKGPWKQENVEAEASMVIAVPEPFGGAIII
GQESITYHNGDKYLAIAPPIIKQSTIVCHNRVDPNGSRYLLGDMEGRLF
MLLLEKEEQMDGTVTLKDLRVELLGETSIAECLTYLDNGVVFVGSRLGD
SQLVKLNVDSNEQGSYVVAMETFTNLGPIVDMCVVDLERQGQGQLVT
CSGAFKEGSLRIIRNGIGIHEHASIDLPGIKGLWPLRSDPNRETDDTLVLS
FVGQTRVLMLNGEEVEETELMGFVDDQQTFFCGNVAHQQLIQITSASV
RLVSQEPKALVSEWKEPQAKNISVASCNSSQVVVAVGRALYYLQIHPQ
ELRQISHTEMEHEVACLDITPLGDSNGLSPLCAIGLWTDISARILKLPSFE
LLHKEMLGGEIIPRSILMTTFESSHYLLCALGDGALFYFGLNIETGLLSDR
KKVTLGTQPTVLRTFRSLSTTNVFACSDRPTVIYSSNHKLVFSNVNLKE
VNYMCPLNSDGYPDSLALANNSTLTIGTIDEIQKLHIRTVPLYESPRKICY
QEVSQCFGVLSSRIEVQDTSGGTTALRPSASTQALSSSVSSSKLFSSST
APHETSFGEEVEVHNLLIIDQHTFEVLHAHQFLQNEYALSLVSCKLGKD
PNTYFIVGTAMVYPEEAEPKQGRIVVFQYSDGKLQTVAEKEVKGAVYS
MVEFNGKLLASINSTVRLYEWTTEKELRTECNHYNNIMALYLKTKGDFIL
VGDLMRSVLLLAYKPMEGNFEEIARDFNPNWMSAVEILDDDNFLGAEN
AFNLFVCQKDSAATTDEERQHLQEVGLFHLGEFVNVFCHGSLVMQNL
GETSTPTQGSVLFGTVNGMIGLVTSLSESWYNLLLDMQNRLNKVIKSV
GKIEHSFWRSFHTERKTEPATGFIDGDLIESFLDISRPKMQEVVANLQY
DDGSGMKREATADDLIKVVEELTRIH