Product Name: DCAF16 / DDB1 / DDA1

Alternate Names: C4orf30

Product Code: TE3-112

FOR RESEARCH USE ONLY (RUO)

Verified Applications / Usage

DCAF16 / DDB1 / DDA1 is active in ternary complex formation assays using recombinant BRD4 and the degrader molecule KB02-JQ1.

Physical Characteristics

Species: Human

Predicted MW (kDa): DCAF16: 26 kDa
DDB1: 129 kDa
DDA1: 12 kDa

Source: Sf9 (*S. frugiperda*)

Purity: 90%

Tags: DCAF16: N-His_8-TEV
DDB1: N-FLAG-TEV
DDA1: Untagged

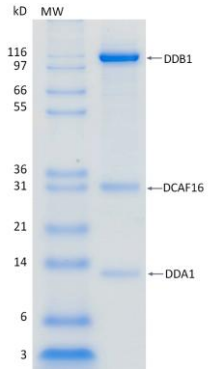
Formulation: 40 mM HEPES, 100 mM NaCl, 10% Glycerol, 1 mM EDTA, 2 mM TCEP, pH 7.6

Shipping: The product is shipped with cold packs or dry ice. 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 ≤ -20°C (stable for 48 months from date of receipt).

Quality Assurance

Purity & SDS-PAGE



2 µg DCAF16 / DDB1 / DDA1 run on 4-12% SDS-PAGE gel under reducing conditions, then visualized with Colloidal Coomassie Blue Stain.

Protein ID: DDB1- and CUL4-associated factor 16
DET1- and DDB1-associated protein 1
DNA damage-binding protein 1

Activity Assay

Verified in Ternary Complex Assay.

Background

Description

DCAF16 is the substrate-receptor of the CUL4–RING E3 ligase CRL4-DCAF16. Recombinant human DCAF16 is co-purified as a stable heterotrimer with its adaptor DDB1 and DDA1, retaining the binding site for reported DCAF16 electrophilic ligands. DCAF16 protein contains an N-terminal His_8-TEV tag, DDB1 contains an N-terminal FLAG-TEV tag, and DDA1 is untagged.

Accession Number: Q9NXF7

Entrez Gene ID: DCAF16

Accession Number: Q16531

Entrez Gene ID: DDB1

Accession Number: Q9BW61

Entrez Gene ID: DDA1

Protein Sequence

DCAF16:

MGHHHHHHHHGSENLYFQGSMGPRNPSPDHLSESESEEEENISYLNESSGEEWDSSEEEDSMV
PNLSPLESLAWQVKCLLKYSTTWKPLNPNSWLYHAKLLDPSTPVHILREIGLRLSHCSHCVPK
LEPIPEWPPLASCGVPPFQKPLTSPSRLSRDHATLNGALQFATKQLSRTLSRATPIPEYLKQI
PNSCVSGCCCGWLTKTVKETTRTEPINTTYSYTDFQKAVNKLLTASL

DDB1:

MDYKDDDDKGSENLYFQGMSYNYVVTAQKPTAVNGCVTGHFTSAEDLNLLIAKNTRLEIYVVT
AEGLRPVKEVGMYGKIAVMELFRPKGESKDLLFILTAKYNACILEYKQSGESIDIITRAHGNV
QDRIGRPSETGIIGIIDPECRMIGLRLYDGLFKVIPLDRDNKELKAFNIRLEELHVIDVKFLY
GCQAPTICFVYQDPQGRHVKTYEVSLREKEFNKGPWKQENVEAEASMVIAVPEPFGGAIIIGQ
ESITYHNGDKYLAIAPPIIKQSTIVCHNRVDPNGSRYLLGDMEGRLFMLLLEKEEQMDGTVTL
KDLRVELLGETSIAECLTYLDNGVVFVGSRLGDSQLVKLNVDSNEQGSYVVAMETFTNLGPIV
DMCVVDLERQGQGQLVTCSGAFKEGSLRIIRNGIGIHEHASIDLPGIKGLWPLRSDPNRETDD
TLVLSFVGQTRVLMLNGEEVEETELMGFVDDQQTFFCGNVAHQQLIQITSASVRLVSQEPKAL
VSEWKEPQAKNISVASCNSSQVVVAVGRALYYLQIHPQELRQISHTEMEHEVACLDITPLGDS
NGLSPLCAIGLWTDISARILKLPSFELLHKEMLGGEIIPRSILMTTFESSHYLLCALGDGALF
YFGLNIETGLLSDRKKVTLGTQPTVLRTFRSLSTTNVFACSDRPTVIYSSNHKLVFSNVNLKE
VNYMCPLNSDGYPDSLALANNSTLTIGTIDEIQKLHIRTVPLYESPRKICYQEVSQCFGVLSS
RIEVQDTSGGTTALRPSASTQALSSSVSSSKLFSSSTAPHETSFGEEVEVHNLLIIDQHTFEV
LHAHQFLQNEYALSLVSCKLGKDPNTYFIVGTAMVYPEEAEPKQGRIVVFQYSDGKLQTVAEK
EVKGAVYSMVEFNGKLLASINSTVRLYEWTTEKELRTECNHYNNIMALYLKTKGDFILVGDLM
RSVLLLAYKPMEGNFEEIARDFNPNWMSAVEILDDDNFLGAENAFNLFVCQKDSAATTDEERQ
HLQEVGLFHLGEFVNVFCHGSLVMQNLGETSTPTQGSVLFGTVNGMIGLVTSLSESWYNLLLD
MQNRLNKVIKSVGKIEHSFWRSFHTERKTEPATGFIDGDLIESFLDISRPKMQEVVANLQYDD
GSGMKREATADDLIKVVEELTRIH

DDA1:

MGMADFLKGLPVYNKSNFSRFHADSVCKASNRRPSVYLPTREYPSEQIIVTEKTNILLRYLHQ
QWDKKNAAKKRDQEQVELEGESSAPPRKVARTDSPDMHEDT