Datasheet for ABIN7553673

DDB2 Protein (AA 1-427) (His tag)

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Overview

Quantity:	1 mg
Target:	DDB2
Protein Characteristics:	AA 1-427
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This DDB2 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant DDB2 Protein expressed in mammalian cells.
Sequence:	MAPKKRPETQ KTSEIVLRPR NKRSRSPLEL EPEAKKLCAK GSGPSRRCDS DCLWVGLAGP QILPPCRSIV RTLHQHKLGR ASWPSVQQGL QQSFLHTLDS YRILQKAAPF DRRATSLAWH PTHPSTVAVG SKGGDIMLWN FGIKDKPTFI KGIGAGGSIT GLKFNPLNTN QFYASSMEGT TRLQDFKGNI LRVFASSDTI NIWFCSLDVS ASSRMVVTGD NVGNVILLNM DGKELWNLRM HKKKVTHVAL NPCCDWFLAT ASVDQTVKIW DLRQVRGKAS FLYSLPHRHP VNAACFSPDG ARLLTTDQKS EIRVYSASQW DCPLGLIPHP HRHFQHLTPI KAAWHPRYNL IVVGRYPDPN FKSCTPYELR TIDVFDGNSG KMMCQLYDPE SSGISSLNEF NPMGDTLASA MGYHILIWSQ EEARTRK **Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.**
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.

Product Details

Characteristics:	Key Benefits: • Made to order protein - from design to production - by highly experienced protein experts. • Protein expressed in mammalian cells and purified in one-step affinity chromatography • The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins. • State-of-the-art algorithm used for plasmid design (Gene synthesis). This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein. If you are not interested in a full length protein, please contact us for individual protein fragments. The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.
Purity:	> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)
Grade:	custom-made

Target Details

Target:	DDB2
Alternative Name:	DDB2 (DDB2 Products)
Background:	DNA damage-binding protein 2 (DDB p48 subunit) (DDBb) (Damage-specific DNA-binding protein 2) (UV-damaged DNA-binding protein 2) (UV-DDB 2),FUNCTION: Protein, which is both involved in DNA repair and protein ubiquitination, as part of the UV-DDB complex and DCX (DDB1-CUL4-X-box) complexes, respectively (PubMed:10882109, PubMed:11278856, PubMed:11705987, PubMed:9892649, PubMed:12732143, PubMed:15882621, PubMed:16473935, PubMed:18593899, PubMed:32789493). Core component of the UV-DDB complex (UV-damaged DNA-binding protein complex), a complex that recognizes UV-induced DNA damage and recruit proteins of the nucleotide excision repair pathway (the NER pathway) to initiate DNA repair (PubMed:10882109, PubMed:11278856, PubMed:11705987, PubMed:16260596, PubMed:12944386, PubMed:14751237, PubMed:32789493). The UV-DDB complex preferentially binds to cyclobutane pyrimidine dimers (CPD), 6-4 photoproducts (6-4 PP), apurinic sites and short mismatches (PubMed:10882109, PubMed:11278856, PubMed:11705987, PubMed:16260596, PubMed:12944386). Also functions as the substrate

Target Details

	recognition module for the DCX (DDB2-CUL4-X-box) E3 ubiquitin-protein ligase complex DDB2-CUL4-ROC1 (also known as CUL4-DDB-ROC1 and CUL4-DDB-RBX1) (PubMed:12732143, PubMed:15882621, PubMed:16473935, PubMed:18593899, PubMed:26572825). The DDB2-CUL4-ROC1 complex may ubiquitinate histone H2A, histone H3 and histone H4 at sites of UV-induced DNA damage (PubMed:16678110, PubMed:16473935). The ubiquitination of histones may facilitate their removal from the nucleosome and promote subsequent DNA repair (PubMed:16678110, PubMed:16473935). The DDB2-CUL4-ROC1 complex also ubiquitinates XPC, which may enhance DNA-binding by XPC and promote NER (PubMed:15882621). The DDB2-CUL4-ROC1 complex also ubiquitinates KAT7/HBO1 in response to DNA damage, leading to its degradation: recognizes KAT7/HBO1 following phosphorylation by ATR (PubMed:26572825). {ECO:0000269|PubMed:10882109, ECO:0000269|PubMed:11278856, ECO:0000269|PubMed:11705987, ECO:0000269|PubMed:12732143, ECO:0000269|PubMed:12944386, ECO:0000269|PubMed:14751237, ECO:0000269|PubMed:15882621, ECO:0000269|PubMed:16260596, ECO:0000269|PubMed:16473935, ECO:0000269|PubMed:16678110, ECO:0000269|PubMed:18593899, ECO:0000269|PubMed:26572825, ECO:0000269|PubMed:32789493, ECO:0000269|PubMed:9892649}., FUNCTION: [Isoform D1]: Inhibits UV-damaged DNA repair. {ECO:0000269|PubMed:14751237}., FUNCTION: [Isoform D2]: Inhibits UV-damaged DNA repair. {ECO:0000269|PubMed:14751237}.
Molecular Weight:	47.9 kDa
UniProt:	Q92466
Pathways:	DNA Damage Repair

Application Details

Application Notes:	We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.

Handling

Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months