Active Recombinant Human KLHDC2 Protein, His tagged

Cat. No. KLHDC2-47H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Active Recombinant Human KLHDC2 Protein with C-8×His tag was expressed in E. coli
Species	Human
Source	E. coli
ProteinLength	1-360 aa
Description	Kelch repeat, beta-propeller structures. These proteins typically function as scaffolds or adaptors in various cellular processes, including protein-protein interactions, cytoskeletal organization, and signal transduction. KLHDC2 is the substrate recognition subunit of a CUL2-RING (CRL2) E3 ubiquitin-protein ligase in the DesCEND (destruction via C-end degrons) pathway. Targets of KLHDC2 include prematurely terminated SELENOK, SELENOS, and other proteins with a C-terminal glycine-glycine motif. KLHDC2-based degradation tools are still in early stages of development compared to more established ligases like VHL or CRBN, but they hold promise for expanding the toolkit of targeted protein degradation for therapeutic applications.
Form	40 mM HEPES, 100 mM NaCl, 10% Glycerol, 1 mM EDTA, 1 mM TCEP, pH 7.6
Bio-activity	Verified in Binary Complex Assay.
Molecular Mass	42 kDa

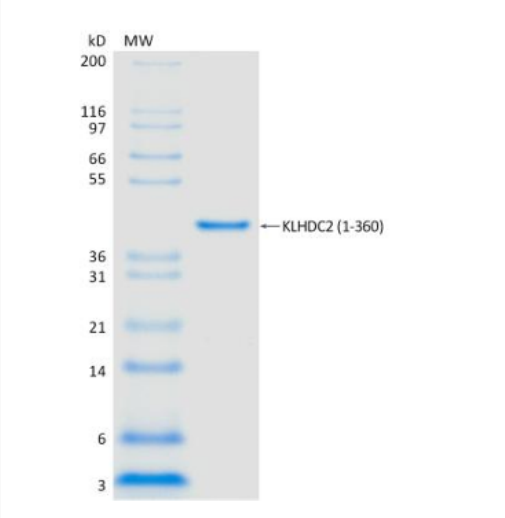
Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

AASequence	MADGNEDLRADDLPGPAFESYESMELACPAERSGHVAVSDGRHMFVWGGYKSNQ VRGLYDFYLPREELWIYNMETGRWKKINTEGDVPPSMSGSCAVCVDRVLYLFGGH HSRGNTNKFYMLDSRSTDRVLQWERIDCQGIPPSSKDKLGVWVYKNKLIFFGGYGY LPEDKVLGTFEFDETSFWNSSHPRGWNDHVHILDTETFTWSQPITTGKAPSPRAAH ACATVGNRGFVFGGRYRDARMNDLHYLNLDTWEWNELIPQGICPVGRSWHSLTPV SSDHLFLFGGFTTDKQPLSDAWTYCISKNEWIQFNHPYTEKPRLWHTACASDEGEVI VFGGCANNLLVHHRAAHSNEILIFSVQGSHHHHHHHH
Purity	0.9
Applications	KLHDC2 is active in a binary complex formation assay using a biotinylated peptide from the human SELK protein.
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. Aliquot and store ≤ -70 centigrade (stable for 24 months from date of receipt).
Concentration	10-15 μM
Reference	1. Rusnac D-V., et al. (2018) Mol Cell 72(5): 813-822. PMID: 30526872 2. Scott D.C., et al. (2023) Mol Cell 83(5): 770-786. PMID: 36805027 3. Hickey C.H., et al. (2024) Nat Struct Mol Biol 31(2):311-322. PMID: 38177675

GENE INFORMATION

Gene Name	KLHDC2 kelch domain containing 2 [Homo sapiens (human)]
Official Symbol	KLHDC2
Synonyms	KLHDC2; kelch domain containing 2; kelch domain-containing protein 2; HCLP 1; LCP; host cell factor homolog LCP; host cell factor-like protein 1; hepatocellular carcinoma-associated antigen 33; HCLP-1;

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

Gene ID	23588
mRNA Refseq	NM_014315
Protein Refseq	NP_055130
MIM	611280
UniProt ID	Q9Y2U9
SDS-PAGE	

2 μg KLHDC2 run on 4-12% SDS-PAGE gel under reducing conditions, then visualized with Colloidal Coomassie Blue Stain.

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA