Datasheet for ABIN7554852

PALB2 Protein (AA 1-1186) (His tag)

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Overview

Quantity:	1 mg
Target:	PALB2
Protein Characteristics:	AA 1-1186
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PALB2 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant PALB2 Protein expressed in mammalian cells.
Sequence:	MDEPPGKPLS CEEKEKLKEK LAFLKREYSK TLARLQRAQR AEKIKHSIKK TVEEQDCLSQ QDLSPQLKHS EPKNKICVYD KLHIKTHLDE ETGEKTSITL DVGPESFNPG DGPGGLPIQR TDDTQEHFPH RVSDPSGEQK QKLPSRRKKQ QKRTFISQER DCVFGTDSLR LSGKRLKEQE EISSKNPARS PVTEIRTHLL SLKSELPDSP EPVTEINEDS VLIPPTAQPE KGVDTFLRRP NFTRATTVPL QTLSDSGSSQ HLEHIPPKGS SELTTHDLKN IRFTSPVSLE AQGKKMTVST DNLLVNKAIS KSGQLPTSSN LEANISCSLN ELTYNNLPAN ENQNLKEQNQ TEKSLKSPSD TLDGRNENLQ ESEILSQPKS LSLEATSPLS AEKHSCTVPE GLLFPAEYYV RTTRSMSNCQ RKVAVEAVIQ SHLDVKKKGF KNKNKDASKN LNLSNEETDQ SEIRMSGTCT GQPSSRTSQK LLSLTKVSSP AGPTEDNDLS RKAVAQAPGR RYTGKRKSAC TPASDHCEPL LPTSSLSIVN RSKEEVTSHK YQHEKLFIQV KGKKSRHQKE DSLSWSNSAY LSLDDDAFTA PFHRDGMLSL KQLLSFLSIT DFQLPDEDFG PLKLEKVKSC SEKPVEPFES KMFGERHLKE GSCIFPEELS PKRMDTEMED LEEDLIVLPG KSHPKRPNSQ SQHTKTGLSS SILLYTPLNT VAPDDNDRPT

Product Details

	TDMCSPAFPI LGTTPAFGPQ GSYEKASTEV AGRTCCTPQL AHLKDSVCLA SDTKQFDSSG SPAKPHTTLQ VSGRQGQPTC DCDSVPPGTP PPIESFTFKE NQLCRNTCQE LHKHSVEQTE TAELPASDSI NPGNLQLVSE LKNPSGSCSV DVSAMFWERA GCKEPCIITA CEDVVSLWKA LDAWQWEKLY TWHFAEVPVL QIVPVPDVYN LVCVALGNLE IREIRALFCS SDDESEKQVL LKSGNIKAVL GLTKRRLVSS SGTLSDQQVE VMTFAEDGGG KENQFLMPPE ETILTFAEVQ GMQEALLGTT IMNNIVIWNL KTGQLLKKMH IDDSYQASVC HKAYSEMGLL FIVLSHPCAK ESESLRSPVF QLIVINPKTT LSVGVMLYCL PPGQAGRFLE GDVKDHCAAA ILTSGTIAIW DLLLGQCTAL LPPVSDQHWS FVKWSGTDSH LLAGQKDGNI FVYHYS **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.
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:	PALB2
Alternative Name:	PALB2 (PALB2 Products)

Target Details

Background:	Partner and localizer of BRCA2,FUNCTION: Plays a critical role in homologous recombination repair (HRR) through its ability to recruit BRCA2 and RAD51 to DNA breaks (PubMed:16793542, PubMed:19423707, PubMed:19369211, PubMed:22941656, PubMed:24141787, PubMed:28319063). Strongly stimulates the DNA strand-invasion activity of RAD51, stabilizes the nucleoprotein filament against a disruptive BRC3-BRC4 polypeptide and helps RAD51 to overcome the suppressive effect of replication protein A (RPA) (PubMed:20871615). Functionally cooperates with RAD51AP1 in promoting of D-loop formation by RAD51 (PubMed:20871616). Serves as the molecular scaffold in the formation of the BRCA1-PALB2-BRCA2 complex which is essential for homologous recombination (PubMed:19369211). Via its WD repeats is proposed to scaffold a HR complex containing RAD51C and BRCA2 which is thought to play a role in HR-mediated DNA repair (PubMed:24141787). Essential partner of BRCA2 that promotes the localization and stability of BRCA2 (PubMed:16793542). Also enables its recombinational repair and checkpoint functions of BRCA2 (PubMed:16793542). May act by promoting stable association of BRCA2 with nuclear structures, allowing BRCA2 to escape the effects of proteasome-mediated degradation (PubMed:16793542). Binds DNA with high affinity for D loop, which comprises single-stranded, double-stranded and branched DNA structures (PubMed:20871616). May play a role in the extension step after strand invasion at replication-dependent DNA double-strand breaks, together with BRCA2 is involved in both POLH localization at collapsed replication forks and DNA polymerization activity (PubMed:24485656). {ECO:0000269|PubMed:16793542, ECO:0000269|PubMed:19369211, ECO:0000269|PubMed:19423707, ECO:0000269|PubMed:20871615, ECO:0000269|PubMed:20871616, ECO:0000269|PubMed:22941656, ECO:0000269|PubMed:24141787, ECO:0000269|PubMed:24485656, ECO:0000269|PubMed:28319063}.
Molecular Weight:	131.3 kDa
UniProt:	Q86YC2
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.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months