Datasheet for ABIN7565305

KEAP1 Protein (AA 1-624) (His tag)

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Overview

Quantity:	1 mg
Target:	KEAP1
Protein Characteristics:	AA 1-624
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This KEAP1 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Purpose:	Custom-made recombinat Keap1 Protein expressed in mammalien cells.
Sequence:	MQPEPKLSGA PRSSQFLPLW SKCPEGAGDA VMYASTECKA EVTPSQDGNR TFSYTLEDHT KQAFGVMNEL RLSQQLCDVT LQVKYEDIPA AQFMAHKVVL ASSSPVFKAM FTNGLREQGM EVVSIEGIHP KVMERLIEFA YTASISVGEK CVLHVMNGAV MYQIDSVVRA CSDFLVQQLD PSNAIGIANF AEQIGCTELH QRAREYIYMH FGEVAKQEEF FNLSHCQLAT LISRDDLNVR CESEVFHACI DWVKYDCPQR RFYVQALLRA VRCHALTPRF LQTQLQKCEI LQADARCKDY LVQIFQELTL HKPTQAVPCR APKVGRLIYT AGGYFRQSLS YLEAYNPSNG SWLRLADLQV PRSGLAGCVV GGLLYAVGGR NNSPDGNTDS SALDCYNPMT NQWSPCASMS VPRNRIGVGV IDGHIYAVGG SHGCIHHSSV ERYEPERDEW HLVAPMLTRR IGVGVAVLNR LLYAVGGFDG TNRLNSAECY YPERNEWRMI TPMNTIRSGA GVCVLHNCIY AAGGYDGQDQ LNSVERYDVE TETWTFVAPM RHHRSALGIT VHQGKIYVLG GYDGHTFLDS VECYDPDSDT WSEVTRMTSG RSGVGVAVTM EPCRKQIDQQ NCTC **Sequence without tag. The proposed Purification-Tag is**

Product Details

	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.
Characteristics:	Key Benefits: • Made to order protein - from design to production - by highly experienced protein experts. • Protein expressed in mammalien 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, Western Blot
Grade:	custom-made

Target Details

Target:	KEAP1
Alternative Name:	Keap1 (KEAP1 Products)
Background:	Kelch-like ECH-associated protein 1 (Cytosolic inhibitor of Nrf2) (INrf2),FUNCTION: Substrate-specific adapter of a BCR (BTB-CUL3-RBX1) E3 ubiquitin ligase complex that regulates the response to oxidative stress by targeting NFE2L2/NRF2 for ubiquitination (PubMed:9887101, PubMed:12682069, PubMed:15282312, PubMed:15367669, PubMed:15581590). KEAP1 acts as a key sensor of oxidative and electrophilic stress: in normal conditions, the BCR(KEAP1) complex mediates ubiquitination and degradation of NFE2L2/NRF2, a transcription factor regulating expression of many cytoprotective genes (PubMed:9887101, PubMed:12193649, PubMed:14764894). In response to oxidative stress, different electrophile metabolites trigger non-enzymatic covalent modifications of highly reactive cysteine residues in KEAP1, leading to inactivate the ubiquitin ligase activity of the BCR(KEAP1) complex, promoting NFE2L2/NRF2 nuclear accumulation and expression of phase II detoxifying enzymes (PubMed:12193649,

Target Details

	PubMed:20498371, PubMed:22014577, PubMed:29590092). In response to selective autophagy, KEAP1 is sequestered in inclusion bodies following its interaction with SQSTM1/p62, leading to inactivation of the BCR(KEAP1) complex and activation of NFE2L2/NRF2 (PubMed:20421418, PubMed:20173742, PubMed:24011591). The BCR(KEAP1) complex also mediates ubiquitination of SQSTM1/p62, increasing SQSTM1/p62 sequestering activity and degradation (PubMed:28380357). The BCR(KEAP1) complex also targets BPTF and PGAM5 for ubiquitination and degradation by the proteasome (By similarity). {ECO:0000250|UniProtKB:Q14145, ECO:0000269|PubMed:12193649, ECO:0000269|PubMed:12682069, ECO:0000269|PubMed:14764894, ECO:0000269|PubMed:15282312, ECO:0000269|PubMed:15367669, ECO:0000269|PubMed:15581590, ECO:0000269|PubMed:20173742, ECO:0000269|PubMed:20421418, ECO:0000269|PubMed:20498371, ECO:0000269|PubMed:22014577, ECO:0000269|PubMed:24011591, ECO:0000269|PubMed:28380357, ECO:0000269|PubMed:29590092, ECO:0000269|PubMed:9887101}.
Molecular Weight:	69.6 kDa
UniProt:	Q9Z2X8
Pathways:	Maintenance of Protein Location

Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies as well. 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