Datasheet for ABIN7553697

DEPDC5 Protein (AA 1-1603) (His tag)

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Overview

Quantity:	1 mg
Target:	DEPDC5
Protein Characteristics:	AA 1-1603
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This DEPDC5 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant DEPDC5 Protein expressed in mammalian cells.
Sequence:	MRTTKVYKLV IHKKGFGGSD DELVVNPKVF PHIKLGDIVE IAHPNDEYSP LLLQVKSLKE DLQKETISVD QTVTQVFRLR PYQDVYVNVV DPKDVTLDLV ELTFKDQYIG RGDMWRLKKS LVSTCAYITQ KVEFAGIRAQ AGELWVKNEK VMCGYISEDT RVVFRSTSAM VYIFIQMSCE MWDFDIYGDL YFEKAVNGFL ADLFTKWKEK NCSHEVTVVL FSRTFYDAKS VDEFPEINRA SIRQDHKGRF YEDFYKVVVQ NERREEWTSL LVTIKKLFIQ YPVLVRLEQA EGFPQGDNST SAQGNYLEAI NLSFNVFDKH YINRNFDRTG QMSVVITPGV GVFEVDRLLM ILTKQRMIDN GIGVDLVCMG EQPLHAVPLF KLHNRSAPRD SRLGDDYNIP HWINHSFYTS KSQLFCNSFT PRIKLAGKKP ASEKAKNGRD TSLGSPKESE NALPIQVDYD AYDAQVFRLP GPSRAQCLTT CRSVRERESH SRKSASSCDV SSSPSLPSRT LPTEEVRSQA SDDSSLGKSA NILMIPHPHL HQYEVSSSLG YTSTRDVLEN MMEPPQRDSS APGRFHVGSA ESMLHVRPGG YTPQRALINP FAPSRMPMKL TSNRRRWMHT FPVGPSGEAI QIHHQTRQNM AELQGSGQRD PTHSSAELLE LAYHEAAGRH SNSRQPGDGM SFLNFSGTEE LSVGLLSNSG AGMNPRTQNK DSLEDSVSTS

	PDPILTLSAP PVVPGFCCTV GVDWKSLTTP ACLPLTTDYF PDRQGLQNDY TEGCYDLLPE ADIDRRDEDG VQMTAQQVFE EFICQRLMQG YQIIVQPKTQ KPNPAVPPPL SSSPLYSRGL VSRNRPEEED QYWLSMGRTF HKVTLKDKMI TVTRYLPKYP YESAQIHYTY SLCPSHSDSE FVSCWVEFSH ERLEEYKWNY LDQYICSAGS EDFSLIESLK FWRTRFLLLP ACVTATKRIT EGEAHCDIYG DRPRADEDEW QLLDGFVRFV EGLNRIRRRH RSDRMMRKGT AMKGLQMTGP ISTHSLESTA PPVGKKGTSA LSALLEMEAS QKCLGEQQAA VHGGKSSAQS AESSSVAMTP TYMDSPRKDG AFFMEFVRSP RTASSAFYPQ VSVDQTATPM LDGTSLGICT GQSMDRGNSQ TFGNSQNIGE QGYSSTNSSD SSSQQLVASS LTSSSTLTEI LEAMKHPSTG VQLLSEQKGL SPYCFISAEV VHWLVNHVEG IQTQAMAIDI MQKMLEEQLI THASGEAWRT FIYGFYFYKI VTDKEPDRVA MQQPATTWHT AGVDDFASFQ RKWFEVAFVA EELVHSEIPA FLLPWLPSRP ASYASRHSSF SRSFGGRSQA AALLAATVPE QRTVTLDVDV NNRTDRLEWC SCYYHGNFSL NAAFEIKLHW MAVTAAVLFE MVQGWHRKAT SCGFLLVPVL EGPFALPSYL YGDPLRAQLF IPLNISCLLK EGSEHLFDSF EPETYWDRMH LFQEAIAHRF GFVQDKYSAS AFNFPAENKP QYIHVTGTVF LQLPYSKRKF SGQQRRRRNS TSSTNQNMFC EERVGYNWAY NTMLTKTWRS SATGDEKFAD RLLKDFTDFC INRDNRLVTF WTSCLEKMHA SAP **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.

Product Details

Purity:	> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)
Grade:	custom-made

Target Details

Target:	DEPDC5
Alternative Name:	DEPDC5 (DEPDC5 Products)
Background:	GATOR1 complex protein DEPDC5 (DEP domain-containing protein 5),FUNCTION: As a component of the GATOR1 complex functions as an inhibitor of the amino acid-sensing branch of the mTORC1 pathway (PubMed:23723238, PubMed:25457612, PubMed:29769719, PubMed:31548394, PubMed:29590090, PubMed:35338845). In response to amino acid depletion, the GATOR1 complex has GTPase activating protein (GAP) activity and strongly increases GTP hydrolysis by RagA/RRAGA (or RagB/RRAGB) within heterodimeric Rag complexes, thereby turning them into their inactive GDP-bound form, releasing mTORC1 from lysosomal surface and inhibiting mTORC1 signaling (PubMed:23723238, PubMed:25457612, PubMed:29769719, PubMed:29590090, PubMed:35338845). In the presence of abundant amino acids, the GATOR1 complex is negatively regulated by GATOR2, the other GATOR subcomplex, in this amino acid-sensing branch of the TORC1 pathway (PubMed:23723238, PubMed:25457612, PubMed:29769719). Within the GATOR1 complex, DEPDC5 mediates direct interaction with the nucleotide-binding pocket of small GTPases Rag (RagA/RRAGA, RagB/RRAGB, RagC/RRAGC and/or RagD/RRAGD) and coordinates their nucleotide loading states by promoting RagA/RRAGA or RagB/RRAGB into their GDP-binding state and RagC/RRAGC or RagD/RRAGD into their GTP-binding state (PubMed:29590090, PubMed:35338845). However, it does not execute the GAP activity, which is mediated by NPRL2 (PubMed:29590090). {ECO:0000269|PubMed:23723238, ECO:0000269|PubMed:25457612, ECO:0000269|PubMed:29590090, ECO:0000269|PubMed:29769719, ECO:0000269|PubMed:31548394, ECO:0000269|PubMed:35338845}.
Molecular Weight:	181.3 kDa
UniProt:	O75140

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.

Application Details

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

