Datasheet for ABIN3092269

ECT2 Protein (AA 2-914) (His tag)

Go to Product page

Overview

Quantity:	1 mg
Target:	ECT2
Protein Characteristics:	AA 2-914
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ECT2 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

Product Details

Sequence:	AENSVLTSTT GRTSLADSSI FDSKVTEISK ENLLIGSTSY VEEEMPQIET RVILVQEAGK QEELIKALKT IKIMEVPVIK IKESCPGKSD EKLIKSVINM DIKVGFVKME SVEEFEGLDS PEFENVFVVT DFQDSVFNDL YKADCRVIGP PVVLNCSQKG EPLPFSCRPL YCTSMMNLVL CFTGFRKKEE LVRLVTLVHH MGGVIRKDFN SKVTHLVANC TQGEKFRVAV SLGTPIMKPE WIYKAWERRN EQDFYAAVDD FRNEFKVPPF QDCILSFLGF SDEEKTNMEE MTEMQGGKYL PLGDERCTHL VVEENIVKDL PFEPSKKLYV VKQEWFWGSI QMDARAGETM YLYEKANTPE LKKSVSMLSL NTPNSNRKRR RLKETLAQLS RETDVSPFPP RKRPSAEHSL SIGSLLDISN TPESSINYGD TPKSCTKSSK SSTPVPSKQS ARWQVAKELY QTESNYVNIL ATIIQLFQVP LEEEGQRGGP ILAPEEIKTI FGSIPDIFDV HTKIKDDLED LIVNWDESKS IGDIFLKYSK DLVKTYPPFV NFFEMSKETI IKCEKQKPRF HAFLKINQAK PECGRQSLVE LLIRPVQRLP SVALLLNDLK KHTADENPDK STLEKAIGSL KEVMTHINED KRKTEAQKQI FDVVYEVDGC PANLLSSHRS LVQRVETISL GEHPCDRGEQ VTLFLFNDCL EIARKRHKVI GTFRSPHGQT RPPASLKHIH

Product Details

	LMPLSQIKKV LDIRETEDCH NAFALLVRPP TEQANVLLSF QMTSDELPKE NWLKMLCRHV ANTICKADAE NLIYTADPES FEVNTKDMDS TLSRASRAIK KTSKKVTRAF SFSKTPKRAL RRALMTSHGS VEGRSPSSND KHVMSRLSST SSLAGIPSPS LVSLPSFFER RSHTLSRSTT HLI **Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.**
Characteristics:	• Made in Germany - from design to production - by highly experienced protein experts. • Human ECT2 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade. • 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 will ensure that you receive a correctly folded protein. 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. In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization). When you order this made-to-order protein you will only pay upon receival of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered. The concentration of our recombinant proteins is measured using the absorbance at 280nm. The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer. The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.
Purification:	Two step purification of proteins expressed in baculovirus infected SF9 insect cells: 1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE. 2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.
Purity:	>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Sterility:	0.22 µm filtered

Product Details

Endotoxin Level:	Protein is endotoxin free.
Grade:	Crystallography grade

Target Details

Target:	ECT2
Alternative Name:	ECT2 (ECT2 Products)
Background:	Guanine nucleotide exchange factor (GEF) that catalyzes the exchange of GDP for GTP. Promotes guanine nucleotide exchange on the Rho family members of small GTPases, like RHOA, RHOC, RAC1 and CDC42. Required for signal transduction pathways involved in the regulation of cytokinesis. Component of the centralspindlin complex that serves as a microtubule-dependent and Rho-mediated signaling required for the myosin contractile ring formation during the cell cycle cytokinesis. Regulates the translocation of RHOA from the central spindle to the equatorial region. Plays a role in the control of mitotic spindle assembly, regulates the activation of CDC42 in metaphase for the process of spindle fibers attachment to kinetochores before chromosome congression. Involved in the regulation of epithelial cell polarity, participates in the formation of epithelial tight junctions in a polarity complex PARD3-PARD6-protein kinase PRKCQ-dependent manner. Plays a role in the regulation of neurite outgrowth. Inhibits phenobarbital (PB)-induced NR1I3 nuclear translocation. Stimulates the activity of RAC1 through its association with the oncogenic PARD6A-PRKCI complex in cancer cells, thereby acting to coordinately drive tumor cell proliferation and invasion. Also stimulates genotoxic stress-induced RHOB activity in breast cancer cells leading to their cell death. {ECO:0000269|PubMed:10579713, ECO:0000269|PubMed:14645260, ECO:0000269|PubMed:15254234, ECO:0000269|PubMed:15545273, ECO:0000269|PubMed:15642749, ECO:0000269|PubMed:16103226, ECO:0000269|PubMed:16170345, ECO:0000269|PubMed:16236794, ECO:0000269|PubMed:16495035, ECO:0000269|PubMed:19129481, ECO:0000269|PubMed:19468300, ECO:0000269|PubMed:19617897, ECO:0000269|PubMed:21189248, ECO:0000269|PubMed:21373644}.
Molecular Weight:	104.3 kDa Including tag.
UniProt:	Q9H8V3
Pathways:	Neurotrophin Signaling Pathway, Cell-Cell Junction Organization

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 gurantee though.
Comment:	In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value 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:	Unlimited (if stored properly)