Datasheet for ABIN3081219

GRB14 Protein (AA 2-540) (His tag)

3 Images

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Overview

Quantity:	1 mg
Target:	GRB14
Protein Characteristics:	AA 2-540
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This GRB14 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

Product Details

Sequence:	MHHHHHHTTS LQDGQSAASR AAARDSPLAA QVCGAAQGRG DAHDLAPAPW LHARALLPLP DGTRGCAADR RKKKDLDVPE MPSIPNPFPE LCCSPFTSVL SADLFPKANS RKKQVIKVYS EDETSRALDV PSDITARDVC QLLILKNHYI DDHSWTLFEH LPHIGVERTI EDHELVIEVL SNWGIEEENK LYFRKNYAKY EFFKNPMYFF PEHMVSFATE TNGEISPTQI LQMFLSSSTY PEIHGFLHAK EQGKKSWKKI YFFLRRSGLY FSTKGTSKEP RHLQFFSEFG NSDIYVSLAG KKKHGAPTNY GFCFKPNKAG GPRDLKMLCA EEEQSRTCWV TAIRLLKYGM QLYQNYMHPY QGRSGCSSQS ISPMRSISEN SLVAMDFSGQ KSRVIENPTE ALSVAVEEGL AWRKKGCLRL GTHGSPTASS QSSATNMAIH RSQPWFHHKI SRDEAQRLII QQGLVDGVFL VRDSQSNPKT FVLSMSHGQK IKHFQIIPVE DDGEMFHTLD DGHTRFTDLI QLVEFYQLNK GVLPCKLKHY CARIAL
Specificity:	N-terminal His-tag
Characteristics:	• Made in Germany - from design to production - by highly experienced protein experts.

Product Details

	• Human GRB14 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 made-to-order protein has already been successfully produced. Please let us know if you are interested in purchasing a smaller amount of this protein. We will check our stock and make you a customized quote in case we can provide this protein in a smaller amount.. 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
Endotoxin Level:	Protein is endotoxin free.
Grade:	Crystallography grade

Target Details

Target:	GRB14
Alternative Name:	GRB14 (GRB14 Products)
Background:	Adapter protein which modulates coupling of cell surface receptor kinases with specific signaling pathways. Binds to, and suppresses signals from, the activated insulin receptor (INSR). Potent inhibitor of insulin-stimulated MAPK3 phosphorylation. Plays a critical role regulating PDPK1 membrane translocation in response to insulin stimulation and serves as an

Target Details

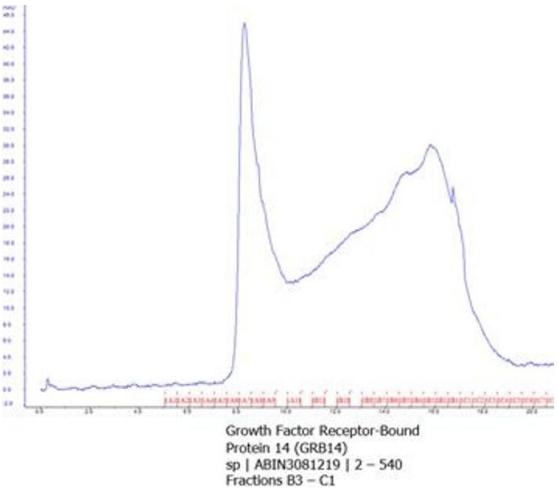
	adapter protein to recruit PDPK1 to activated insulin receptor, thus promoting PKB/AKT1 phosphorylation and transduction of the insulin signal. {ECO:0000269|PubMed:15210700, ECO:0000269|PubMed:19648926}.
Molecular Weight:	61.8 kDa Including tag.
UniProt:	Q14449

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.
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

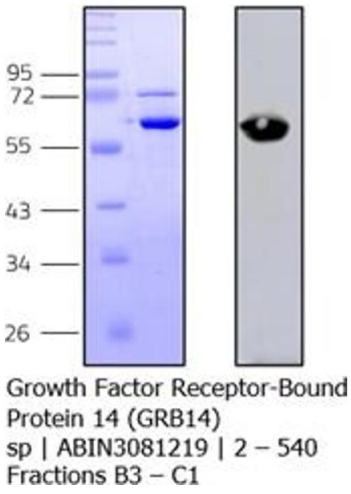
Format:	Liquid
Buffer:	50 mM Tris, pH 8; 300 mM NaCl
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)



Size-exclusion chromatography-High Pressure Liquid Chromatography

Image 1.

Image 2. „Crystallography Grade“ protein due to multi-step, protein-specific purification process



Western Blotting

Image 3.