Datasheet for ABIN7553805

EPS8 Protein (AA 1-822) (His tag)

Go to Product page

Overview

Quantity:	1 mg
Target:	EPS8
Protein Characteristics:	AA 1-822
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This EPS8 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Purpose:	Custom-made recombinat EPS8 Protein expressed in mammalien cells.
Sequence:	MNGHISNHPS SFGMYPSQMN GYGSSPTFSQ TDREHGSKTS AKALYEQRKN YARDSVSSVS DISQYRVEHL TTFVLDRKDA MITVDDGIRK LKLLDAKGKV WTQDMILQVD DRAVSLIDLE SKNELENFPL NTIQHCQAVM HSCSYDSVLA LVCKEPTQNK PDLHLFQCDE VKANLISEDI ESAISDSKGG KQKRRPDALR MISNADPSIP PPPRAPAPAP PGTVTQVDVR SRVAAWSAWA ADQGDFEKPR QYHEQEETPE MMAARIDRDV QILNHILDDI EFFITKLQKA AEAFSELSKR KKNKKGKRKG PGEGVLTLRA KPPPPDEFLD CFQKFKHGFN LLAKLKSHIQ NPSAADLVHF LFTPLNMVVQ ATGGPELASS VLSPLLNKDT IDFLNYTVNG DERQLWMSLG GTWMKARAEW PKEQFIPPYV PRFRNGWEPP MLNFMGATME QDLYQLAESV ANVAEHQRKQ EIKRLSTEHS SVSEYHPADG YAFSSNIYTR GSHLDQGEAA VAFKPTSNRH IDRNYEPLKT QPKKYAKSKY DFVARNNSEL SVLKDDILEI LDDRKQWWKV RNASGDSGFV PNNILDIVRP PESGLGRADP PYTHTIQKQR MEYGPRPADT PPAPSPPPTP APVPVPLPPS TPAPVPVSKV PANITRQNSS

Product Details

	SSDSGGSIVR DSQRHKQLPV DRRKSQMEEV QDELIHRLTI GRSAAQKKFH VPRQNVPVIN ITYDSTPEDV KTWLQSKGFN PVTVNSLGVL NGAQLFSLNK DELRTVCPEG ARVYSQITVQ KAALEDSSGS SELQEIMRRR QEKISAAASD SGVESFDEGS SH **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.**
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:	EPS8
Alternative Name:	EPS8 (EPS8 Products)
Background:	Epidermal growth factor receptor kinase substrate 8,FUNCTION: Signaling adapter that controls various cellular protrusions by regulating actin cytoskeleton dynamics and architecture. Depending on its association with other signal transducers, can regulate different processes. Together with SOS1 and ABI1, forms a trimeric complex that participates in transduction of signals from Ras to Rac by activating the Rac-specific guanine nucleotide exchange factor (GEF) activity. Acts as a direct regulator of actin dynamics by binding actin filaments and has both barbed-end actin filament capping and actin bundling activities depending on the context.

Target Details

	Displays barbed-end actin capping activity when associated with ABI1, thereby regulating actin-based motility process: capping activity is auto-inhibited and inhibition is relieved upon ABI1 interaction. Also shows actin bundling activity when associated with BAIAP2, enhancing BAIAP2-dependent membrane extensions and promoting filopodial protrusions. Involved in the regulation of processes such as axonal filopodia growth, stereocilia length, dendritic cell migration and cancer cell migration and invasion. Acts as a regulator of axonal filopodia formation in neurons: in the absence of neurotrophic factors, negatively regulates axonal filopodia formation via actin-capping activity. In contrast, it is phosphorylated in the presence of BDNF leading to inhibition of its actin-capping activity and stimulation of filopodia formation. Component of a complex with WHRN and MYO15A that localizes at stereocilia tips and is required for elongation of the stereocilia actin core. Indirectly involved in cell cycle progression, its degradation following ubiquitination being required during G2 phase to promote cell shape changes. {ECO:0000269|PubMed:15558031, ECO:0000269|PubMed:17115031}.
Molecular Weight:	91.9 kDa
UniProt:	Q12929
Pathways:	EGFR Signaling Pathway, Regulation of Actin Filament Polymerization

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

