

Datasheet for ABIN7553785 EMP2 Protein (AA 1-167) (His tag)



Overview

Quantity:	1 mg
Target:	EMP2
Protein Characteristics:	AA 1-167
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This EMP2 protein is labelled with His tag.

Product Details	
Purpose:	Custom-made recombinant EMP2 Protein expressed in mammalian cells.
Sequence:	MLVLLAFIIA FHITSAALLF IATVDNAWWV GDEFFADVWR ICTNNTNCTV INDSFQEYST
	LQAVQATMIL STILCCIAFF IFVLQLFRLK QGERFVLTSI IQLMSCLCVM IAASIYTDRR
	EDIHDKNAKF YPVTREGSYG YSYILAWVAF ACTFISGMMY LILRKRK 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.

Purity:

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

Grade:

custom-made

Target Details

Target:

EMP2

Alternative Name:

EMP2 (EMP2 Products)

Background:

Epithelial membrane protein 2 (EMP-2) (Protein XMP), FUNCTION: Functions as a key regulator of cell membrane composition by regulating protein surface expression. Also, plays a role in regulation of processes including cell migration, cell proliferation, cell contraction and cell adhesion. Regulates transepithelial migration of neutrophils into the alveolar lumen, potentially via mediation of cell surface expression of adhesion markers and lipid raft formation (By similarity). Negatively regulates caveolae formation by reducing CAV1 expression and CAV1 amount by increasing lysosomal degradation (PubMed:24814193). Facilitates surface trafficking and formation of lipid rafts bearing GPI-anchor proteins (By similarity). Regulates surface expression of MHC1 and ICAM1 proteins increasing susceptibility to T-cell mediated cytotoxicity (By similarity). Regulates the plasma membrane expression of the integrin heterodimers ITGA6-ITGB1, ITGA5-ITGB3 and ITGA5-ITGB1 resulting in modulation of cellmatrix adhesion (PubMed:16216233). Also regulates many processes through PTK2. Regulates blood vessel endothelial cell migration and angiogenesis by regulating VEGF protein expression through PTK2 activation (PubMed:23439602). Regulates cell migration and cell contraction through PTK2 and SRC activation (PubMed:21637765, PubMed:22728127). Regulates focal adhesion density, F-actin conformation and cell adhesion capacity through interaction with PTK2 (PubMed:19494199). Positively regulates cell proliferation (PubMed:24814193). Plays a

role during cell death and cell blebbing (PubMed:12107182). Promotes angiogenesis and vasculogenesis through induction of VEGFA via a HIF1A-dependent pathway (PubMed:23334331). Also plays a role in embryo implantation by regulating surface trafficking of integrin heterodimer ITGA5-ITGB3 (PubMed:16487956). Plays a role in placental angiogenesis and uterine natural killer cell regulation at the maternal-fetal placental interface, however not required in the maternal tissues for a viable pregnancy (By similarity). Involved in the early stages of embryogenic development and cardiogenesis, potentially via regulation of epithelial-mesenchymal transition timing (By similarity). May play a role in glomerular filtration (By similarity). {ECO:0000250|UniProtKB:F1QIK8, ECO:0000250|UniProtKB:088662, ECO:0000269|PubMed:12107182, ECO:0000269|PubMed:16216233, ECO:0000269|PubMed:16487956, ECO:0000269|PubMed:19494199, ECO:0000269|PubMed:21637765, ECO:0000269|PubMed:22728127, ECO:0000269|PubMed:233334331, ECO:0000269|PubMed:23439602,

ECO:0000269|PubMed:24814193}.

Molecular Weight: 19.2 kDa

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.

Restrictions: For Research Use only

P54851

Handling

UniProt:

Format: Liquid Buffer: The buffer composition is at the discretion of the manufacturer. Handling Advice: Avoid repeated freeze-thaw cycles. -80 °C Storage: Store at -80°C. Storage Comment: 12 months **Expiry Date:**