

Product datasheet

Recombinant Human TCTEX-1 protein ab106872

[1 Image](#)

Description

Product name	Recombinant Human TCTEX-1 protein
Purity	> 95 % SDS-PAGE. ab106872 is purified using conventional chromatography techniques.
Expression system	Escherichia coli
Accession	<u>P63172</u>
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Sequence	MGSSHHHHHSSGLVPRGSHMEDIYQAAEETAFVVDEV SNVKEAIESAIG GNAYQHSKVNQWTTNVVEQTLSQLTKLGKPFKYIVTCVIM QKNGAGLHTA SSCFWDSSTDGSC TVRWENKTMYCIVSAFGLSI
Predicted molecular weight	15 kDa including tags
Amino acids	1 to 113
Tags	His tag N-Terminus

Specifications

Our **Abpromise guarantee** covers the use of **ab106872** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	SDS-PAGE Mass Spectrometry
Mass spectrometry	MALDI-TOF
Form	Liquid
Additional notes	This product was previously labelled as DYNLT1

Preparation and Storage

Stability and Storage

Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

pH: 8.00

Constituents: 0.0154% DTT, 0.316% Tris HCl, 30% Glycerol (glycerin, glycerine), 0.58% Sodium chloride

General Info

Function

Acts as one of several non-catalytic accessory components of the cytoplasmic dynein 1 complex that are thought to be involved in linking dynein to cargos and to adapter proteins that regulate dynein function. Cytoplasmic dynein 1 acts as a motor for the intracellular retrograde motility of vesicles and organelles along microtubules. Binds to transport cargos and is involved in apical cargo transport such as rhodopsin-bearing vesicles in polarized epithelia. Is involved in intracellular targeting of D-type retrovirus gag polyproteins to the cytoplasmic assembly site. May also be a accessory component of axonemal dynein.

Plays a role in neuronal morphogenesis; the function is independent of cytoplasmic dynein and seems to be coupled to regulation of the actin cytoskeleton by enhancing Rac1 activity. The function in neurogenesis may be regulated by association with a G-protein beta-gamma dimer. May function as a receptor-independent activator of heterotrimeric G-protein signaling; the activation appears to be independent of a nucleotide exchange. Plays a role in regulating neurogenesis; inhibits the genesis of neurons from precursor cells during cortical development presumably by antagonizing ARHGEF2. Involved in the regulation of mitotic spindle orientation.

Tissue specificity

Expressed in heart, placenta, skeletal muscle kidney, pancreas, spleen, prostate, testis, ovary, ileum and colon. Expressed in lung endothelial and smooth muscle cells (at protein level).

Sequence similarities

Belongs to the dynein light chain Tctex-type family.

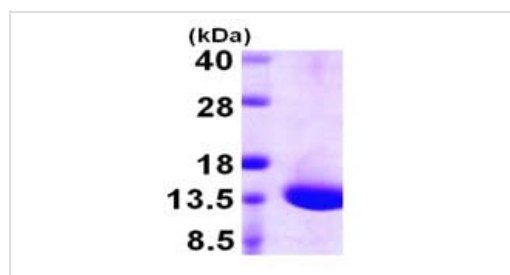
Post-translational modifications

Phosphorylated by BMPR2; the phosphorylation is abolished by BMPR2 mutations in exon 12 which lead to truncated forms of BMPR2 and which are linked to primary pulmonary hypertension (PPH1) [MIM:178600]. The phosphorylation status is proposed to regulate the association with the cytoplasmic dynein complex and may have role in cytoplasmic dynein cargo release.

Cellular localization

Golgi apparatus. Cytoplasm. Cytoplasm > cytoskeleton > spindle. Localizes to mitotic spindles.

Images



SDS-PAGE - Recombinant Human TCTEX-1 protein
(ab106872)

15% SDS-PAGE analysis of 3µg ab106872.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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