abcam

Product datasheet

Recombinant Human alpha Actinin 4 protein ab126006

Description

Product name	Recombinant Human alpha Actinin 4 protein
Purity	> 70 % SDS-PAGE. Purified via His tag
Expression system	Escherichia coli
Accession	O43707
Protein length	Protein fragment
Animal free	No
Nature	Recombinant
Species	Human
Predicted molecular weight	29 kDa
Amino acids	397 to 648

Specifications

Our **Abpromise guarantee** covers the use of **ab126006** 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
Form	Lyophilized

Preparation and Storage

Stability and Storage	Shipped at 4°C. Store at -20°C. Constituents: 0.32% Tris HCl, 0.58% Sodium chloride
Reconstitution	Reconstitute with water to desired concentration.

General Info

Function	F-actin cross-linking protein which is thought to anchor actin to a variety of intracellular structures. This is a bundling protein. Probably involved in vesicular trafficking via its association with the

	CART complex. The CART complex is necessary for efficient transferrin receptor recycling but not for EGFR degradation.
Tissue specificity	Widely expressed.
Involvement in disease	Defects in ACTN4 are the cause of focal segmental glomerulosclerosis type 1 (FSGS1) [MIM:603278]. A renal pathology defined by the presence of segmental sclerosis in glomeruli and resulting in proteinuria, reduced glomerular filtration rate and edema. Renal insufficiency often progresses to end-stage renal disease, a highly morbid state requiring either dialysis therapy or kidney transplantation.
Sequence similarities	Belongs to the alpha-actinin family. Contains 1 actin-binding domain. Contains 2 CH (calponin-homology) domains. Contains 2 EF-hand domains. Contains 4 spectrin repeats.
Cellular localization	Nucleus. Cytoplasm. Localized in cytoplasmic mRNP granules containing untranslated mRNAs. Colocalizes with actin stress fibers. Nuclear translocation can be induced by the PI3 kinase inhibitor wortmannin or by cytochalasin D. Exclusively localized in the nucleus in a limited number of cell lines.