abcam

Product datasheet

Recombinant Human Caveolin-1 protein ab114170

2 Images

Description

Product name Recombinant Human Caveolin-1 protein

Expression system Wheat germ
Accession Q03135

Protein length Full length protein

Animal free No

Nature Recombinant

Species Human

Sequence MSGGKYVDSEGHLYTVPIREQGNIYKPNNKAMADELSEKQ

VYDAHTKEID

LVNRDPKHLNDDVVKIDFEDVIAEPEGTHSFDGIWKASFT

TFTVTKYWFY

RLLSALFGIPMALIWGIYFAILSFLHWAVVPCIKSFLIEIQCIS

RVYSI YVHTVCDPLFEAVGKIFSNVRINLQKEI

Predicted molecular weight 46 kDa including tags

Amino acids 1 to 178

Additional sequence information There is a GST tag at N-terminal end.

Specifications

Our Abpromise guarantee covers the use of ab114170 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

Western blot

ELISA

Form Liquid

Preparation and Storage

Stability and Storage Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.

pH: 8.00

Constituents: 0.3% Glutathione, 0.79% Tris HCI

1

General Info

Function May act as a scaffolding protein within caveolar membranes. Interacts directly with G-protein

alpha subunits and can functionally regulate their activity (By similarity). Involved in the

costimulatory signal essential for T-cell receptor (TCR)-mediated T-cell activation. Its binding to DPP4 induces T-cell proliferation and NF-kappa-B activation in a T-cell receptor/CD3-dependent

manner. Recruits CTNNB1 to caveolar membranes and may regulate CTNNB1-mediated

signaling through the Wnt pathway.

Tissue specificity Expressed in muscle and lung, less so in liver, brain and kidney.

Involvement in diseaseDefects in CAV1 are the cause of congenital generalized lipodystrophy type 3 (CGL3)

[MIM:612526]; also called Berardinelli-Seip congenital lipodystrophy type 3 (BSCL3). Congenital generalized lipodystrophies are autosomal recessive disorders characterized by a near absence of adipose tissue, extreme insulin resistance, hypertriglyceridemia, hepatic steatosis and early

onset of diabetes.

Sequence similaritiesBelongs to the caveolin family.

Post-translational modifications

The initiator methionine for isoform Beta is removed during or just after translation. The new N-

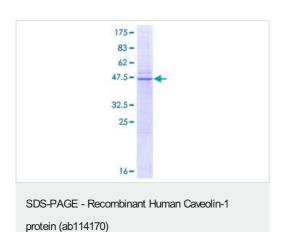
terminal amino acid is then N-acetylated.

Cellular localization Golgi apparatus membrane. Cell membrane. Membrane > caveola. Membrane raft. Colocalized

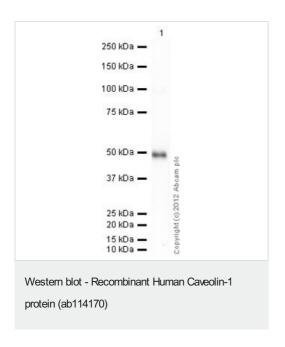
with DPP4 in membrane rafts. Potential hairpin-like structure in the membrane. Membrane protein

of caveolae.

Images



ab114170 on a 12.5% SDS-PAGE Stained with Coomassie Blue.



<u>ab18199</u> recognizes the full length tagged recombinant Caveolin 1 protein (ab114170) which has an expected molecular weight of 46 kDa.

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors