abcam

Product datasheet

Anti-Caveolin-1 (phospho Y14) antibody ab38468

Overview

Product name Anti-Caveolin-1 (phospho Y14) antibody

Description Rabbit polyclonal to Caveolin-1 (phospho Y14)

Host species Rabbit

Tested applications Suitable for: WB

Species reactivity Reacts with: Mouse

Immunogen Synthetic peptide corresponding to Human Caveolin-1 (phospho Y14).

Database link: Q03135

General notes

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

Properties

Form Liquid

Storage instructions Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

Storage buffer pH: 7.4

Preservative: 0.02% Sodium azide

Constituents: 50% Glycerol, 0.87% Sodium chloride, PBS

Without Mg2+ and Ca2+

Purity Immunogen affinity purified

Purification notes The antibody against non-phosphopeptide was removed by chromatography using non-

phosphopeptide corresponding to the phosphorylation site.

Clonality Polyclonal

Isotype IgG

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Applications

The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab38468 in the following tested applications.

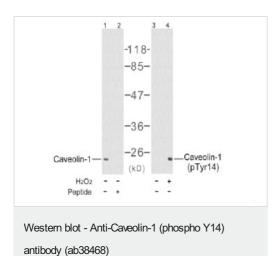
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★☆ (1)	1/500 - 1/1000. Detects a band of approximately 20 kDa (predicted molecular weight: 20 kDa).

Target

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 disease	Defects 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 similarities	Belongs 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	

Images



Lanes 1-2: Caveolin-1 Antibody

Lanes 3-4: Anti-Caveolin-1 (phospho Y14) antibody (ab38468) at 1/500 dilution

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

Lane 1: NIH 3T3 cell extract

Lane 2: NIH 3T3 cell extract. Pre-incubated with synthesized

peptide

of caveolae.

Lane 3: NIH 3T3 cell extract.

Lane 4: NIH 3T3 cell extract. Treated with H₂O₂.

Predicted band size: 20 kDa **Observed band size:** 20 kDa

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

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