

Datasheet for ABIN6255810
anti-Caveolin-1 antibody (pTyr14)

3 Images

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Overview

Quantity:	100 µL
Target:	Caveolin-1 (CAV1)
Binding Specificity:	pTyr14
Reactivity:	Human, Rat, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Caveolin-1 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunofluorescence (IF), Immunocytochemistry (ICC)

Product Details

Immunogen:	A synthesized peptide derived from human Caveolin 1 around the phosphorylation site of Tyr14.
Isotype:	IgG
Specificity:	Phospho-Caveolin 1 (Tyr14) Antibody detects endogenous levels of Caveolin 1 only when phosphorylated at Tyrosine 14.
Predicted Reactivity:	Pig,Bovine,Horse,Sheep,Rabbit,Dog
Purification:	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho- and non-phospho-peptide affinity columns.

Target Details

Target:	Caveolin-1 (CAV1)
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Target Details

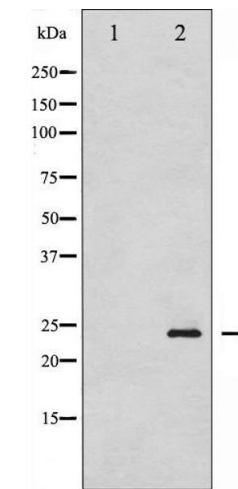
Alternative Name:	CAV1 (CAV1 Products)
Background:	<p>Description: May act as a scaffolding protein within caveolar membranes. Interacts directly with G-protein alpha subunits and can functionally regulate their activity (By similarity). Involved in the costimulatory signal essential for T-cell receptor (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. Negatively regulates TGFβ1-mediated activation of SMAD2/3 by mediating the internalization of TGFβR1 from membrane rafts leading to its subsequent degradation (PubMed:25893292). Mediates the recruitment of CAVIN proteins (CAVIN1/2/3/4) to the caveolae (PubMed:19262564).</p> <p>Gene: CAV1</p>
Molecular Weight:	23kDa
Gene ID:	857
UniProt:	Q03135
Pathways:	Maintenance of Protein Location , Signaling Events mediated by VEGFR1 and VEGFR2 , Negative Regulation of Transporter Activity , VEGFR1 Specific Signals

Application Details

Application Notes:	WB 1:500-1:2000, IF/ICC 1:100-1:500, ELISA(peptide) 1:20000-1:40000
Restrictions:	For Research Use only

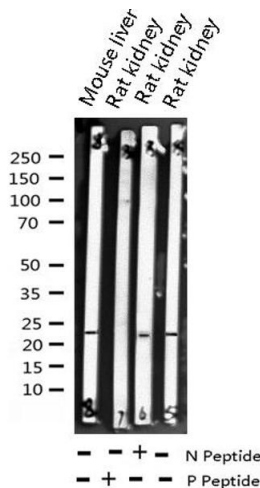
Handling

Format:	Liquid
Concentration:	1 mg/mL
Buffer:	Rabbit IgG in phosphate buffered saline , pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store at -20 °C. Stable for 12 months from date of receipt.



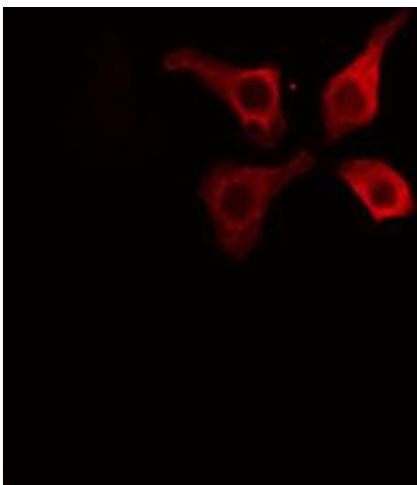
Western Blotting

Image 1. Western blot analysis of Caveolin-1 phosphorylation expression in H2O2 treated NIH-3T3 whole cell lysates, The lane on the left is treated with the antigen-specific peptide.



Western Blotting

Image 2. Western blot analysis of Phospho-Caveolin-1 (Tyr14) expression in various lysates



Immunofluorescence (fixed cells)

Image 3. ABIN6267595 staining HuvEc cells by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25°C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37°C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) antibody (Cat.# S0006), diluted at 1/600, was used as secondary antibody.