

Datasheet for ABIN233829
anti-ROCK2 antibody (pTyr256)[Go to Product page](#)**1** Image**1** Publication

Overview

Quantity:	100 µg
Target:	ROCK2
Binding Specificity:	pTyr256
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This ROCK2 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA

Product Details

Immunogen:	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to residues surrounding Y256 of human ROCK-2.
Isotype:	IgG
Characteristics:	Concentration Definition: by UV absorbance at 280 nm

Target Details

Target:	ROCK2
Alternative Name:	Rock-2 (ROCK2 Products)
Background:	This antibody is designed, produced, and is suitable for Cancer, Immunology and Nuclear Signaling research. Progression of tumors to invasive and metastatic forms requires that tumor

Target Details

cells undergo dramatic morphological changes, a process regulated by Rho GTPases. Increased levels of RhoA or RhoC, as well as the Rho effector proteins ROCK-1 or ROCK-2, were observed in various human carcinomas. In vivo studies have also shown that ROCK inhibition reduced the invasiveness of several tumor cell lines. It is suggested that Rho and ROCK signaling contribute to the morphological changes and metastatic behavior of some tumor cells. Thus, elevated Rho and ROCK expression is associated with tumorigenesis, particularly during the progression to invasive and metastatic phenotypes. Phosphorylation of certain residues in ROCK-2 may be critical for its kinase activity.

Synonyms: Rho-associated protein kinase 2 EC=2.7.11.1 Rho-associated, coiled-coil-containing protein kinase 2 p164 ROCK-2 Rho kinase 2

Gene ID: 9475, 4520225

UniProt: [O75116](#)

Pathways: [Microtubule Dynamics](#), [WNT Signaling](#), [Tube Formation](#)

Application Details

Application Notes: This affinity purified antibody has been tested for use in ELISA and western blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 164 kDa in size corresponding to phosphorylated ROCK-2 by western blotting in the appropriate cell lysate or extract. This phospho-specific polyclonal antibody reacts with human ROCK-2 pY256 and shows minimal reactivity by ELISA against the non-phosphorylated form of the immunizing peptide.

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: 1.0 mg/mL

Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

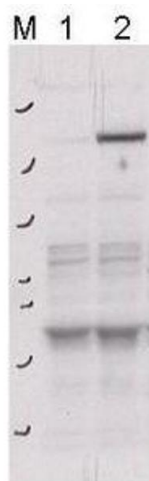
Preservative: Sodium azide

Precaution of Use: This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: -20 °C

- Product cited in: Contreras-Jurado, García-Serrano, Martínez-Fernández, Ruiz-Llorente, Paramio, Aranda: "Impaired hair growth and wound healing in mice lacking thyroid hormone receptors." in: **PLoS ONE**, Vol. 9, Issue 9, pp. e108137, (2015) ([PubMed](#)).
- Mishra, Zhu, Ge, Cheng: "Adipogenesis is differentially impaired by thyroid hormone receptor mutant isoforms." in: **Journal of molecular endocrinology**, Vol. 44, Issue 4, pp. 247-55, (2010) ([PubMed](#)).

Images



Western Blotting

Image 1. Western blot using affinity purified anti-ROCK-2 pY256 antibody shows detection of phosphorylated ROCK-2 in transfected 293T cells. Lane 1 shows lysate expressing exogenous ROCK-2 where the insert contains the transversion Y256A. Lane 2 shows the lysate expressing WT ROCK-2. A lysate containing a GST null vector also shows no specific staining (data not shown). Primary antibody was used at a 1:1000 dilution. Personal Communication, A. Papageorge and X. Qian, NCI, Bethesda, MD.