

ROCK1 Antibody (monoclonal) (M01)**Mouse monoclonal antibody raised against a partial recombinant ROCK1.****Catalog # AT3686a****Specification**

ROCK1 Antibody (monoclonal) (M01) - Product Information

Application	WB, IF, E
Primary Accession	Q13464
Other Accession	NM_005406
Reactivity	Human
Host	mouse
Clonality	Monoclonal
Isotype	IgG1 Kappa
Calculated MW	158175

ROCK1 Antibody (monoclonal) (M01) - Additional Information**Gene ID** 6093**Other Names**

Rho-associated protein kinase 1, Renal carcinoma antigen NY-REN-35, Rho-associated, coiled-coil-containing protein kinase 1, Rho-associated, coiled-coil-containing protein kinase I, ROCK-I, p160 ROCK-1, p160ROCK, ROCK1

Target/Specificity

ROCK1 (NP_005397, 401 a.a. ~ 510 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

Dilution

WB~~1:500~1000

IF~~1:50~200

E~~N/A

Format

Clear, colorless solution in phosphate buffered saline, pH 7.2 .

Storage

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Precautions

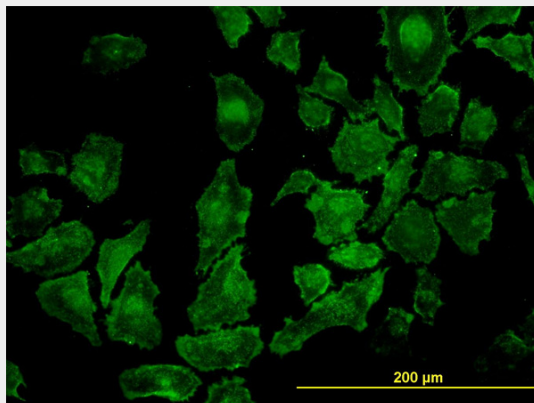
ROCK1 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

ROCK1 Antibody (monoclonal) (M01) - Protocols

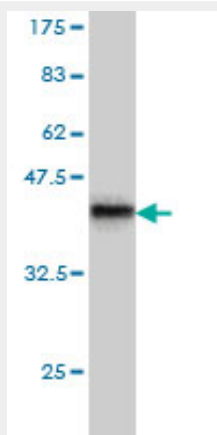
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

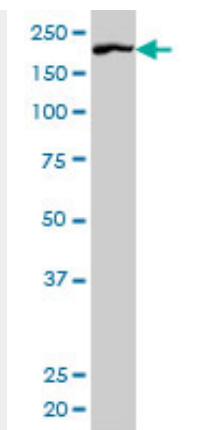
ROCK1 Antibody (monoclonal) (M01) - Images



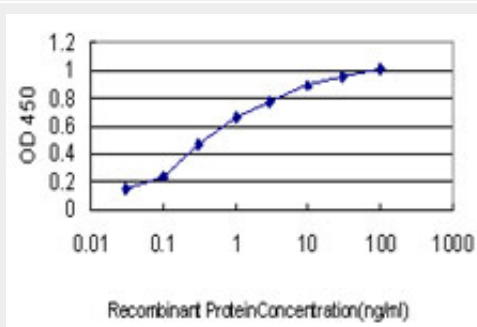
Immunofluorescence of monoclonal antibody to ROCK1 on HeLa cell. [antibody concentration 10 ug/ml]



Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (37.84 KDa) .



ROCK1 monoclonal antibody (M01), clone 2E2 Western Blot analysis of ROCK1 expression in HeLa S3 NE (Cat # AT3686a)



Detection limit for recombinant GST tagged ROCK1 is approximately 0.03ng/ml as a capture antibody.

ROCK1 Antibody (monoclonal) (M01) - Background

This gene encodes a protein serine/threonine kinase that is activated when bound to the GTP-bound form of Rho. The small GTPase Rho regulates formation of focal adhesions and stress fibers of fibroblasts, as well as adhesion and aggregation of platelets and lymphocytes by shuttling between the inactive GDP-bound form and the active GTP-bound form. Rho is also essential in cytokinesis and plays a role in transcriptional activation by serum response factor. This protein, a downstream effector of Rho, phosphorylates and activates LIM kinase, which in turn, phosphorylates cofilin, inhibiting its actin-depolymerizing activity.

ROCK1 Antibody (monoclonal) (M01) - References

1. A novel role of Rho-kinase in the regulation of ligand-induced phosphorylated EGFR endocytosis via the early/late endocytic pathway in human fibrosarcoma cells. Nishimura Y, Bereczky B, Yoshioka K, Taniguchi S, Itoh K. *J Mol Histol.* 2011 Oct;42(5):427-42. Epub 2011 Aug 17. 2. Integration of virtual screening with high-throughput screening for the identification of novel Rho-kinase I inhibitors. Gong LL, Fang LH, Peng JH, Liu AL, Du GH. *J Biotechnol.* 2009 Dec 4. [Epub ahead of print]