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# ROCK1 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant ROCK1.
Catalog # AT3686a

## Product Information

| | |
|---|---|
| **Application** | WB, IF, E |
| **Primary Accession** | Q13464 |
| **Other Accession** | NM_005406 |
| **Reactivity** | Human |
| **Host** | mouse |
| **Clonality** | monoclonal |
| **Isotype** | IgG1 Kappa |
| **Clone Names** | 2E3 |
| **Calculated MW** | 158175 |

## Additional Information

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|---|---|
| **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. |

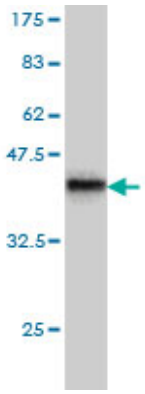
## Background

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.

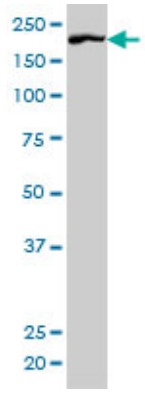
## References

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]

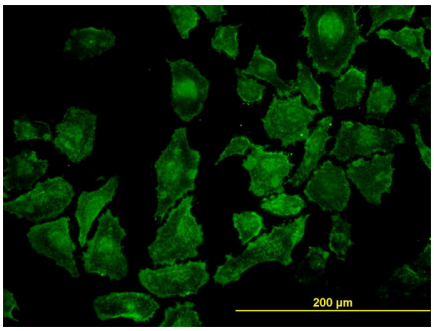
## Images



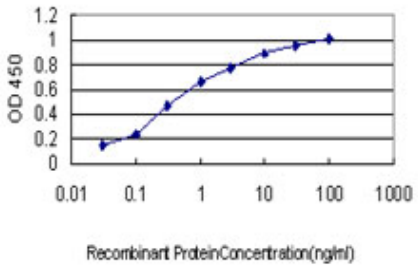

Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (37.84 KDa) .




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




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




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