Technical Data Sheet

# Purified Mouse anti-Actopaxin (pS8)

## Product Information

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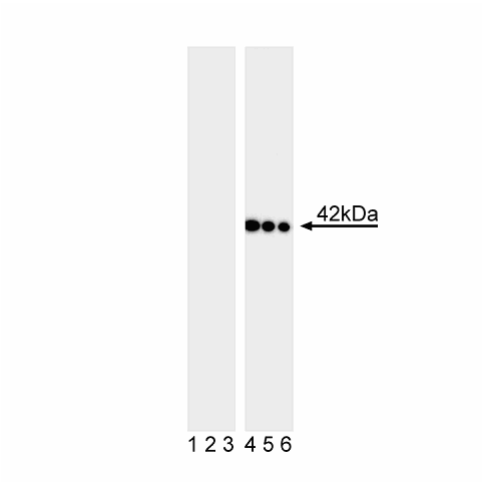
|---|---|
| **Material Number:** | **558374** |
| **Size:** | 0.1 mg |
| **Concentration:** | 0.5 mg/ml |
| **Clone:** | J160-366 |
| **Immunogen:** | Phosphorylated Human and Rat Actopaxin |
| **Isotype:** | Mouse (BALB/c) IgG1, κ |
| **Reactivity:** | QC Testing: Human |
| **Target MW:** | 42 kDa |
| **Storage Buffer:** | Aqueous buffered solution containing ≤0.09% sodium azide. |

## Description

Actopaxin (also known as α-parvin or CH-ILKBP) is an adaptor protein that is found in focal adhesions (FA), where integrins in the cell membrane interact with the extracellular matrix, links the FA to the actin cytoskeleton, and is involved in the transduction of intracellular signals. The actopaxin molecule is composed almost entirely of two tandem calponin homology (CH) domains. The C-terminal CH domain mediates binding to paxillin, actin, and the serine/threonine kinases integrin-linked kinase and testicular protein kinase I. Serines in the N terminus of Actopaxin are phosphorylated by cyclin B/cdc2 during mitosis or by Erk during cell migration. This is consistent with the possibility that actopaxin is involved in regulating the organization of the cellular actin cytoskeleton. Actopaxin is expressed in nearly all tissues, whereas the β-parvin and γ-parvin have tissue-restricted expression.

The J160-366 monoclonal antibody recognizes the phosphorylated S8 of human actopaxin.




***Western blot analysis of Actopaxin (pS8) in transformed human epithelioid carcinoma.*** *Lysates from control (left panel) and Nocodazole-treated (right panel) HeLa S3 cell line were probed with purified mouse anti-Actopaxin (pS8) monoclonal antibody at concentrations of 4.0 (lanes 1 and 4), 2.0 (lanes 2 and 5), and 1.0 µg/ml (lanes 3 and 6). Actopaxin (pS8) is identified as a band of 42 kDa in the treated cells.*

## Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Store undiluted at 4°C.

## Application Notes

**Application**

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|---|---|
| Western blot | Routinely Tested |

## Suggested Companion Products

| Catalog Number | Name | Size | Clone |
|---|---|---|---|
| 554002 | HRP Goat Anti-Mouse Ig | 1.0 ml | (none) |

## Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

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3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

## References


Clarke DM, Brown MC, LaLonde DP, Turner CE. Phosphorylation of actopaxin regulates cell spreading and migration. *J Cell Biol.* 2004; 166(6):901-912.(Biology)

Curtis M, Nikolopoulos SN, Turner CE. Actopaxin is phosphorylated during mitosis and is a substrate for cyclin B1/cdc2 kinase. *Biochem J.* 2002; 363:233-242.(Biology)

Korenbaum E, Olski TM, Noegel AA. Genomic organization and expression profile of the parvin family of focal adhesion proteins in mice and humans. *Gene.* 2001; 279:69-79.(Biology)

LaLonde DP, Brown MC, Bouverat BP, Turner CE. Actopaxin interacts with TESK1 to regulate cell spreading on fibronectin. *J Biol Chem.* 2005; 280(22):21680-21688.(Biology)

Nikolopoulos SN, Turner CE. Molecular dissection of actopaxin-integrin-linked kinase-paxillin interactions and their role in subcellular localization. *J Biol Chem.* 2002; 277(2):1568-1575.(Biology)

Wu C. The PINCH-ILK-parvin complexes: assembly, functions and regulation. *Biochim Biophys Acta.* 2004; 1692(2-3):55-62.(Biology)