

**α -Parvin (D7F9) XP[®] Rabbit mAb
(Sepharose Bead Conjugate)****Orders:** 877-616-CELL (2355)
orders@cellsignal.com**Support:** 877-678-TECH (8324)**Web:** info@cellsignal.com
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
IP	H M R Mk Dg	Endogenous	43	Rabbit IgG	#Q9NVD7	55742

Product Usage Information**Application**

Immunoprecipitation

Dilution

1:20

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol. Store at -20°C. Do not aliquot the antibodies.

Specificity/Sensitivity α -Parvin (D7F9) XP[®] Rabbit mAb (Sepharose Bead Conjugate) recognizes endogenous levels of total α -parvin protein.**Source / Purification**Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues near the amino terminus of human α -parvin protein.**Description**This Cell Signaling Technology antibody is immobilized via covalent binding of primary amino groups to N-hydroxysuccinimide (NHS)-activated Sepharose beads. α -Parvin (D7F9) XP[®] Rabbit mAb (Sepharose Bead Conjugate) is useful for the immunoprecipitation of α -Parvin. The antibody is expected to exhibit the same species cross-reactivity as the unconjugated α -Parvin (D7F9) XP[®] Rabbit mAb #8190.**Background**

The extracellular matrix (ECM) is a complex structure of secreted macromolecules surrounding mammalian organs and tissues. Controlled interactions between cells and the ECM are important in proliferation, migration, survival, polarity, and differentiation. Cells contact the ECM primarily through heterodimeric integral membrane proteins called integrins. Integrins connect the ECM to the cytoskeleton, and therefore the cell signaling machinery, through protein complexes called focal adhesions (1).

The ILK/PINCH/Parvin (IPP) complex is composed of three highly conserved proteins recruited to sites of ECM contact as pre-assembled structures. The IPP acts at the interface of the integrin/actin connection to regulate formation of focal adhesions and integrin signaling. All three proteins contain multiple protein binding domains allowing them to function as adaptor proteins in the formation of focal adhesions. ILK (integrin-linked kinase) also has a catalytic (protein Ser/Thr kinase) domain, and may or may not function as a kinase *in vivo*. Roles for IPP proteins outside of the IPP complex have been proposed, including regulation of gene expression (2,3).

The parvin family consists of 3 members, α -parvin/actopaxin, β -parvin/affixin, and γ -parvin. α -parvin and β -parvin are expressed ubiquitously, while expression of γ -parvin is restricted to hematopoietic cells (4). α -parvin binds to f-actin both directly and via interaction with the focal adhesion protein paxillin (5). α -parvin regulates cell spreading and motility through interactions with the cofilin kinase TESK1 (6), and with the GTPase activating protein CdGAP (7). Phosphorylation of α -parvin during mitosis may have a role in the regulation of actin dynamics during the cell cycle (8).

Background References

- Burridge, K. et al. (1988) *Annu Rev Cell Biol* 4, 487-525.
- Legate, K.R. et al. (2006) *Nat Rev Mol Cell Biol* 7, 20-31.
- Wu, C. (2004) *Biochim Biophys Acta* 1692, 55-62.
- Korenbaum, E. et al. (2001) *Gene* 279, 69-79.
- Nikolopoulos, S.N. and Turner, C.E. (2000) *J Cell Biol* 151, 1435-48.
- LaLonde, D.P. et al. (2005) *J Biol Chem* 280, 21680-8.
- LaLonde, D.P. et al. (2006) *Curr Biol* 16, 1375-85.
- Curtis, M. et al. (2002) *Biochem J* 363, 233-42.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Applications Key**IP:** Immunoprecipitation**Cross-Reactivity Key****H:** Human **M:** Mouse **R:** Rat **Mk:** Monkey **Dg:** Dog**Trademarks and Patents**

Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc.

XP is a registered trademark of Cell Signaling Technology, Inc.

All other trademarks are the property of their respective owners. Visit cellsignal.com/trademarks for more information.

Limited Uses

Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no force or effect.

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.