

Myosin VI (D5Y5A) Rabbit mAb

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:
W	H Dg	Endogenous	150	Rabbit IgG	#Q9UM54	4646

Product Usage Information**Application**

Western Blotting

Dilution

1:1000

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

Myosin VI (D5Y5A) Rabbit mAb recognizes endogenous levels of total myosin VI protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Arg1131 of human myosin VI protein.

Background

The myosin family of motor proteins drive ATP-dependent actin-based motility in eukaryotic cells and contain a conserved amino-terminal motor domain (reviewed in 1,2).

Myosin VI is an unconventional minus-end-directed myosin involved in the transport of vesicles and organelles within the cell, endocytosis, and organelle biogenesis (3-6). The movement of myosin VI and its cargo along actin filaments is unique among myosin family members in its mechanism; its tail domain structure allows it to take larger than predicted steps along the actin filament (reviewed in 1,7).

Myosin VI has been shown to regulate the polarized delivery of proteins to specialized subcellular locations, including the delivery of EGFR to the leading edge of migrating cells (8), as well as the delivery of specialized axonal proteins in neurons (9). Myosin VI has also been shown to mediate activity of the tumor suppressor p53 during DNA damage (10,11).

Background References

1. Sweeney, H.L. and Houdusse, A. (2010) *Cell* 141, 573-82.
2. Nambiar, R. et al. (2010) *Cell Mol Life Sci* 67, 1239-54.
3. Bond, L.M. et al. (2011) *Mol Biol Cell* 22, 54-65.
4. Aschenbrenner, L. et al. (2004) *Mol Biol Cell* 15, 2253-63.
5. Loubéry, S. et al. (2012) *Traffic* 13, 665-80.
6. Ameen, N. and Apodaca, G. (2007) *Traffic* 8, 998-1006.
7. Spudich, J.A. and Sivaramakrishnan, S. (2010) *Nat Rev Mol Cell Biol* 11, 128-37.
8. Chibalina, M.V. et al. (2010) *Traffic* 11, 1290-303.
9. Lewis, T.L. et al. (2011) *PLoS Biol* 9, e1001021.
10. Jung, E.J. et al. (2006) *Mol Cell Biol* 26, 2175-86.
11. Cho, S.J. and Chen, X. (2010) *J Biol Chem* 285, 27159-66.

Species Reactivity

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

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting

Cross-Reactivity Key

H: Human **Dg:** Dog

Trademarks and Patents

Cell Signaling Technology is a 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.