

#2094 Store at -20°C

Rab7 Antibody

✓ 100 µl
(10 western blots)

Orders ■ 877-616-CELL (2355)
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This product is intended for research purposes only. This product is not intended to be used for therapeutic or diagnostic purposes in humans or animals.

Entrez-Gene ID # 7879
Swiss-Prot Acc. # P51149

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W, IF-IC Endogenous	H, M	23 kDa	Rabbit**

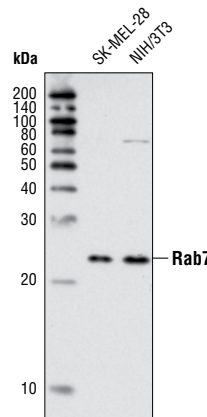
Background: Rab7 and Rab9 are members of the Ras superfamily of small Rab GTPases (1). Both proteins are located in late endosomes but exert different functions. Rab7 associates with the RIPL effector protein to control membrane trafficking from early to late endosome and to lysosomes (2,3). Rab7 also helps to regulate growth receptor endocytic trafficking and degradation (3,4), and maturation of phagosome and autophagic vacuoles (4-6). Rab9 interacts with its effector proteins p40 and TIP47 (7,8) to promote the MPRs (mannose 6-phosphate receptors)-associated lysosome enzyme transport between late endosomes and the trans Golgi network (9,10).

Specificity/Sensitivity: Rab7 Antibody detects endogenous levels of total Rab7 protein.

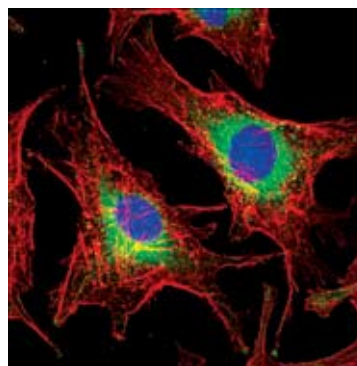
Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide (KLH-coupled) corresponding residue surrounding Asp193 of human Rab7. Antibodies are purified by peptide affinity chromatography.

Background References:

- Zerial, M. and McBride, H. (2001) *Nat Rev Mol Cell Biol* 2, 107-17.
- Feng, Y. et al. (1995) *J Cell Biol* 131, 1435-52.
- Méresse, S. et al. (1995) *J Cell Sci* 108 (Pt 11), 3349-58.
- Ceresa, B.P. and Bahr, S.J. (2006) *J Biol Chem* 281, 1099-106.
- Jäger, S. et al. (2004) *J Cell Sci* 117, 4837-48.
- Méresse, S. et al. (1999) *EMBO J* 18, 4394-403.
- Díaz, E. et al. (1997) *J Cell Biol* 138, 283-90.
- Barbero, P. et al. (2002) *J Cell Biol* 156, 511-8.
- Lombardi, D. et al. (1993) *EMBO J* 12, 677-82.
- Riederer, M.A. et al. (1994) *J Cell Biol* 125, 573-82.



Western blot analysis of extracts from SK-MEL-28 and NIH/3T3 cells using Rab7 Antibody.



Confocal immunofluorescent analysis of SK-MEL-28 cells using Rab7 Antibody (green). Actin filaments have been labeled with DY-554 phalloidin (red). Blue pseudocolor = DRAQ5™ (fluorescent DNA dye).

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

*Species cross-reactivity is determined by western blot.

**Anti-rabbit secondary antibodies must be used to detect this antibody.

Recommended Antibody Dilutions:

Western blotting 1:1000
Immunofluorescence (IF-IC) 1:50

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

IMPORTANT: For Western blots, incubate membrane with diluted antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide
Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine
Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.