

#2143 Store at -20°C

Rab5 Antibody

✓ 100 µl
(10 western blots)

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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.

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W, IF-IC Endogenous	H, M, R, Mk, Hm	25 kDa	Rabbit**

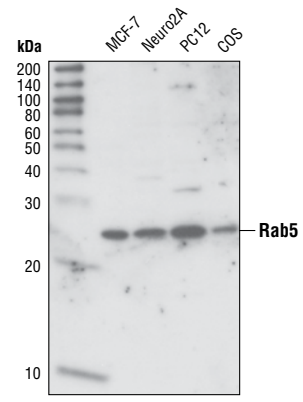
Background: Rab5 is a member of the Ras superfamily of small Rab GTPases. Rab5 is localized at the plasma membrane and early endosomes and functions as a key regulator of vesicular trafficking during early endocytosis (1). The conformational change between Rab5 GTP/GDP state is essential for its biological function as a rate limiting regulator at multiple steps during endocytosis (1,2). Rab5 exerts its function by interacting with several Rab5-specific effectors (1-3). These proteins form complexes with Rab5 on a specialized Rab domain of the endosome and promote recycling of Rab5-cargo targets between endosome and the plasma membrane.

Specificity/Sensitivity: Rab5 Antibody detects endogenous levels of total Rab5 protein.

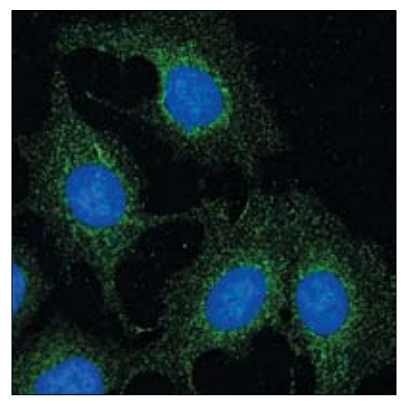
Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide (KLH-coupled) corresponding residue surrounding Gly190 of human Rab5 protein. Antibodies are purified by protein A and peptide affinity chromatography.

Background References:

- (1) Zerial, M. and McBride, H. (2001) *Nat. Rev. Mol. Cell Biol.* 2, 107-117.
- (2) van der Bliek, A.M. (2005) *Nat. Cell Biol.* 7, 548-550.
- (3) Haas, A.K. et al. (2005) *Nat. Cell Biol.* 7, 887-893.



Western blot analysis of extracts from MCF-7, Neuro2A, PC12 and COS cells, using Rab5 Antibody.



Confocal immunofluorescent analysis of MCF-7 cells, using Rab5 Antibody (green). Blue pseudocolor = DRAQ5™ (fluorescent DNA dye).

Entrez-Gene ID #1001
Swiss-Prot Acc. #P22223

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)	1:100

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.