

# EEA1 Antibody

✓ 100 µl  
(10 western blots)

**Orders** ■ 877-616-CELL (2355)  
orders@cellsignal.com  
**Support** ■ 877-678-TECH (8324)  
info@cellsignal.com  
**Web** ■ www.cellsignal.com

rev. 11/09/11

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, IP, IF-IC Endogenous	H, M, R, Mk	170 kDa	Rabbit

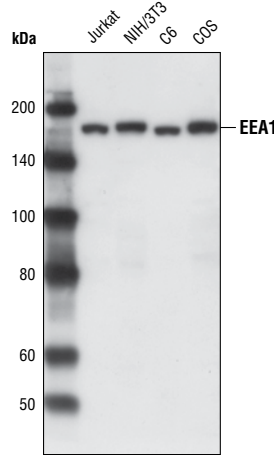
**Background:** EEA1 is an early endosomal marker and a Rab5 effector protein essential for early endosomal membrane fusion and trafficking (1-2). The carboxy terminus of EEA1 contains a FYVE domain which binds to phosphatidylinositol-3-phosphate (PtdIns(3)P), targeting EEA1 to early endosomes (3). The stable association of EEA1 with the endosomal membrane is regulated by PI3 kinase, Rab5 and calcium/calmodulin (4-6). Once on the membrane, EEA1 interacts with Rab5, NSF and syntaxin 13 to promote early endosomal membrane docking and fusion (7).

**Specificity/Sensitivity:** EEA1 Antibody detects endogenous levels of total EEA1 protein.

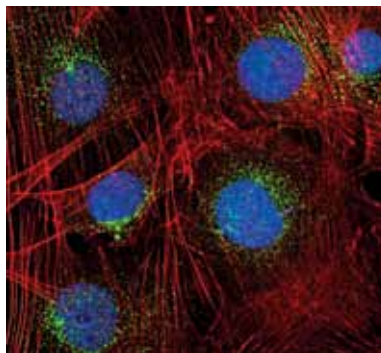
**Source/Purification:** Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Gly14 of human EEA1 protein. Antibodies are purified by peptide affinity chromatography.

**Background References:**

- (1) Mu, F.T. et al. (1995) *J. Biol. Chem.* 270, 13503–13511.
- (2) Christoforidis, S. et al. (1999) *Nature* 397, 621–625.
- (3) Gaullier, J.M. et al. (1998) *Nature* 394, 432–433.
- (4) Patki, V. et al. (1997) *Proc. Natl. Acad. Sci USA* 94, 7326–7330.
- (5) Lawe, D.C. et al. (2003) *Mol. Biol. Cell* 14, 2935–2945.
- (6) Simonsen, A. et al. (1998) *Nature* 394, 494–498.
- (7) McBride, H.M. et al. (1999) *Cell* 98, 377–386.



Western blot analysis of extracts from various cell types using EEA1 Antibody.



Confocal immunofluorescent analysis of NIH/3T3 cells using EEA1 Antibody (green). Actin filaments have been labeled with Alexa Fluor® 555 phalloidin (red). Blue pseudocolor = DRAQ5® #4084 (fluorescent DNA dye).

Entrez-Gene ID #1213  
Swiss-Prot Acc. #Q00610

**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
Immunoprecipitation	1:25
Immunofluorescence (IF-IC)	1:100

For application specific protocols please see the web page for this product at [www.cellsignal.com](http://www.cellsignal.com).

Please visit [www.cellsignal.com](http://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.**

DRAQ5® is a registered trademark of Biostatus Limited.