

**#3288**  
Store at -20C**EEA1 (C45B10) Rabbit mAb****Cell Signaling**  
TECHNOLOGY®**Orders:** 877-616-CELL (2355)  
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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:
WB, IP, IF-F, IF-IC	H M R	Endogenous	170	Rabbit IgG	#Q15075	8411

**Product Usage Information****Application**

Western Blotting  
Immunoprecipitation  
Immunofluorescence (Frozen)  
Immunofluorescence (Immunocytochemistry)

**Dilution**

1:1000  
1:100  
1:50 - 1:200  
1:50 - 1:200

**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.

For a carrier free (BSA and azide free) version of this product see product #65014.

**Specificity / Sensitivity**

EEA1 (C45B10) Rabbit mAb detects endogenous levels of total EEA1 protein.

**Source / Purification**

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ser70 of human EEA1 protein.

**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).

**Background References**

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

**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**

**WB:** Western Blotting **IP:** Immunoprecipitation **IF-F:** Immunofluorescence (Frozen)  
**IF-IC:** Immunofluorescence (Immunocytochemistry)

**Cross-Reactivity Key**

**H:** human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **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  
**GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

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