

EEA1 (C45B10) Rabbit mAb

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, 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

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.

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

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat

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