

EEA 1

Cat.No. 237 105; Polyclonal Guinea pig antibody, 50 µg specific antibody (lyophilized)

Data Sheet

Reconstitution/ Storage	50 µg specific antibody, lyophilized. Affinity purified with the immunogen. Guinea pig serum albumin was added for stabilization. For reconstitution add 50 µl H ₂ O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use.
Applications	WB: 1 : 1000 AP staining IP: not tested yet ICC: 1 : 500 IHC: 1 : 500 IHC-P/FFPE: not tested yet
Immunogen	Synthetic peptide corresponding to AA 1 to 15 from mouse EEA1 (UniProt Id: Q8BL66)
Reactivity	Reacts with: mouse (Q8BL66), rat (A0A0G2K051). Other species not tested yet.
Specificity	Specific for EEA 1

**TO BE USED IN VITRO / FOR RESEARCH ONLY
NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS**

Extracellular compounds are internalized by endocytosis into so called endocytic vesicles. They fuse with early endosomes, from where the endocytosed material can be shuttled to a number of alternative destinations.

Early endosomal antigen 1 (EEA 1) is a peripheral membrane protein that locates to early endosomes via binding to the membrane lipid phosphatidylinositol 3-phosphate (PtdIns3P) and the active form of Rab5.

Autoantibodies against EEA 1 have been shown to be associated with subacute cutaneous systemic lupus erythematosus.

Selected General References

Cell-cycle-dependent binding kinetics for the early endosomal tethering factor EEA1.

Bergeland T, Haugen L, Landsverk OJ, Stenmark H, Bakke O

EMBO reports (2008) 9(2): 171-8.

EEA1, a tethering protein of the early sorting endosome, shows a polarized distribution in hippocampal neurons, epithelial cells, and fibroblasts.

Wilson JM, de Hoop M, Zorzi N, Toh BH, Dotti CG, Parton RG

Molecular biology of the cell (2000) 11(8): 2657-71.

The Rab5 effector EEA1 interacts directly with syntaxin-6.

Simonsen A, Gaullier JM, D'Arrigo A, Stenmark H

The Journal of biological chemistry (1999) 274(41): 28857-60.

The endosome fusion regulator early-endosomal autoantigen 1 (EEA1) is a dimer.

Callaghan J, Simonsen A, Gaullier JM, Toh BH, Stenmark H

The Biochemical journal (1999) 338 (Pt 2): 539-43.

Endosomal localization of the autoantigen EEA1 is mediated by a zinc-binding FYVE finger.

Stenmark H, Aasland R, Toh BH, D'Arrigo A

The Journal of biological chemistry (1996) 271(39): 24048-54.

EEA1, an early endosome-associated protein. EEA1 is a conserved alpha-helical peripheral membrane protein flanked by cysteine "fingers" and contains a calmodulin-binding IQ motif.

Mu FT, Callaghan JM, Steele-Mortimer O, Stenmark H, Parton RG, Campbell PL, McCluskey J, Yeo JP, Tock EP, Toh BH

The Journal of biological chemistry (1995) 270(22): 13503-11.