

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