

Technical Data Sheet

Purified Mouse Anti-EEA1**Product Information**

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|-------------------------|--|
| Material Number: | 610456 |
| Size: | 50 µg |
| Concentration: | 250 µg/ml |
| Clone: | 14/EEA1 |
| Immunogen: | Human EEA1 aa. 3-281 |
| Isotype: | Mouse IgG1 |
| Reactivity: | QC Testing: Rat Tested in Development: Chicken, Dog, Human |
| Target MW: | 180 kDa |
| Storage Buffer: | Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide. |

Description

Early endosomes are a major cytoplasmic sorting compartment from which receptors and ligands may be distributed to various sites within the cell. Early endosome antigen 1 (EEA1) is a 180 kDa hydrophilic peripheral membrane protein present in cytosol and membrane fractions. Immunofluorescence studies show that EEA1 colocalizes to early endosomes with transferrin receptor and Rab5, but not with the late endosome-localizing Rab7. EEA1 is predominantly α -helical and shares 17-20% sequence identity with the myosins. It contains a calmodulin-binding IQ motif and metal-binding cysteine "finger" motifs. It is thought that EEA1 is required for vesicular transport of proteins through early endosomes and that these finger motifs are required for this activity.

This antibody is routinely tested by western blot analysis. Other applications were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.



Western blot analysis of EEA1 on rat brain lysate.
Lane 1: 1:2500, lane 2: 1:5000, lane 3: 1:10000 dilution of anti-EEA1 antibody.



Immunostaining on Human Smooth Muscle

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. Store undiluted at -20° C.

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Application Notes

Application

| | |
|----------------------|---------------------------|
| Western blot | Routinely Tested |
| Immunofluorescence | Tested During Development |
| Immunoprecipitation | Not Recommended |
| Immunohistochemistry | Not Recommended |

Suggested Companion Products

| Catalog Number | Name | Size | Clone |
|----------------|--------------------------|--------|------------|
| 611463 | Rat Cerebrum Lysate | 500 µg | (none) |
| 554002 | HRP Goat Anti-Mouse Igs | 1.0 ml | (none) |
| 554001 | FITC Goat Anti-Mouse Igs | 0.5 mg | Polyclonal |

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharming/en/protocols for technical protocols.
3. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
4. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

References

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Yan R, Han P, Miao H, Greengard P, Xu H. The transmembrane domain of the Alzheimer's beta-secretase (BACE1) determines its late Golgi localization and access to beta-amyloid precursor protein (APP) substrate. *J Biol Chem*. 2001; 276(39):36788-36796.(Clone-specific: Immunofluorescence)