

EEA1 (C-15): sc-6414

BACKGROUND

Early endosomes are cytoplasmic compartments that function in receiving and sorting endocytosed proteins for vesicular transport. EEA1 (early endosome antigen 1) is a peripheral membrane protein that co-localizes with the transferrin receptor and Rab5 on early endosomes. EEA1 contains a calmodulin-binding IQ motif and cysteine rich finger motif necessary for its specific localization to the early endosomes. EEA1 has sequence homology to several yeast proteins that have been implicated in membrane trafficking, including Vps27, Fab1 and Vac1. Evidence suggests a possible role for EEA1 in mediating the regulatory effects of 3'-phosphoinositides on membrane trafficking.

CHROMOSOMAL LOCATION

Genetic locus: EEA1 (human) mapping to 12q22; Eea1 (mouse) mapping to 10 C2.

SOURCE

EEA1 (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of EEA1 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-6414 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

EEA1 (C-15) is recommended for detection of EEA1 of mouse, rat, human and monkey origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

EEA1 (C-15) is also recommended for detection of EEA1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for EEA1 siRNA (h): sc-35263, EEA1 siRNA (m): sc-35264, EEA1 shRNA Plasmid (h): sc-35263-SH, EEA1 shRNA Plasmid (m): sc-35264-SH, EEA1 shRNA (h) Lentiviral Particles: sc-35263-V and EEA1 shRNA (m) Lentiviral Particles: sc-35264-V.

Molecular Weight of EEA1: 162 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, A-431 whole cell lysate: sc-2201 or NIH/3T3 whole cell lysate: sc-2210.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

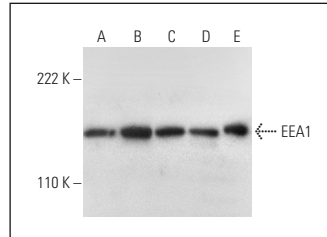
PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

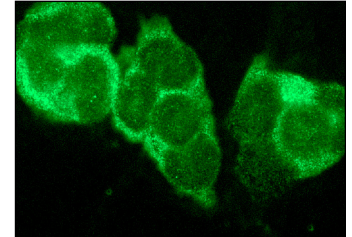
RESEARCH USE

For research use only, not for use in diagnostic procedures.

DATA



EEA1 (C-15): sc-6414. Western blot analysis of EEA1 expression in A-431 (A), NIH/3T3 (B), Jurkat (C), C6 (D) and COS (E) whole cell lysates.



EEA1 (C-15): sc-6414. Immunofluorescence staining of methanol-fixed A-431 cells showing cytoplasmic staining.

SELECT PRODUCT CITATIONS

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2. Jacobsen, K.T., et al. 2010. Insulin-like growth factor-1 (IGF-1)-induced processing of amyloid- β precursor protein (APP) and APP-like protein 2 is mediated by different metalloproteinases. *J. Biol. Chem.* 285: 10223-10231.
3. Inoue, M., et al. 2010. Paracrine role of GABA in adrenal chromaffin cells. *Cell. Mol. Neurobiol.* 30: 1217-1224.
4. Berger, S.B., et al. 2010. SLAM is a microbial sensor that regulates bacterial phagosome functions in macrophages. *Nat. Immunol.* 11: 920-927.
5. Delputte, P.L., et al. 2011. Porcine sialoadhesin (CD169/Siglec-1) is an endocytic receptor that allows targeted delivery of toxins and antigens to macrophages. *PLoS ONE* 6: e16827.
6. Cao, Y., et al. 2011. Distinct early molecular responses to mutations causing vLINCL and JNCL presage ATP synthase subunit C accumulation in cerebellar cells. *PLoS ONE* 6: e17118.
7. Zemskov, E.A., et al. 2011. Unconventional secretion of tissue transglutaminase involves phospholipid-dependent delivery into recycling endosomes. *PLoS ONE* 6: e19414.
8. Li, Q., et al. 2013. Estradiol accelerates the effects of fluoxetine on serotonin 1A receptor signaling. *Psychoneuroendocrinology* 38: 1145-1157.



Try **EEA1 (G-4): sc-137130** or **EEA1 (E-8): sc-365652**, our highly recommended monoclonal alternatives to EEA1 (C-15). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **EEA1 (G-4): sc-137130**.