

EPS8 Antibody (C-Term)

Peptide-affinity purified goat antibody Catalog # AF2362a

Specification

EPS8 Antibody (C-Term) - Product Information

Application IHC
Primary Accession 012929

Other Accession
Predicted

NP_004438.3, 2059, 13860 (mouse)
Human, Mouse, Rat, Pig, Dog

Host Goat
Clonality Polyclonal
Concentration 0.5 mg/ml

Isotype IgG
Calculated MW 91882

EPS8 Antibody (C-Term) - Additional Information

Gene ID 2059

Other Names

Epidermal growth factor receptor kinase substrate 8, EPS8

Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

EPS8 Antibody (C-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

EPS8 Antibody (C-Term) - Protein Information

Name EPS8

Function

Signaling adapter that controls various cellular protrusions by regulating actin cytoskeleton dynamics and architecture. Depending on its association with other signal transducers, can regulate different processes. Together with SOS1 and ABI1, forms a trimeric complex that participates in transduction of signals from Ras to Rac by activating the Rac-specific guanine nucleotide exchange factor (GEF) activity. Acts as a direct regulator of actin dynamics by binding actin filaments and has both barbed-end actin filament capping and actin bundling activities depending on the context. Displays barbed-end actin capping activity when associated with ABI1, thereby regulating actin- based motility process: capping activity is auto-inhibited and inhibition is



relieved upon ABI1 interaction. Also shows actin bundling activity when associated with BAIAP2, enhancing BAIAP2-dependent membrane extensions and promoting filopodial protrusions. Involved in the regulation of processes such as axonal filopodia growth, stereocilia length, dendritic cell migration and cancer cell migration and invasion. Acts as a regulator of axonal filopodia formation in neurons: in the absence of neurotrophic factors, negatively regulates axonal filopodia formation via actin-capping activity. In contrast, it is phosphorylated in the presence of BDNF leading to inhibition of its actin-capping activity and stimulation of filopodia formation. Component of a complex with WHRN and MYO15A that localizes at stereocilia tips and is required for elongation of the stereocilia actin core. Indirectly involved in cell cycle progression; its degradation following ubiquitination being required during G2 phase to promote cell shape changes.

Cellular Location

Cytoplasm, cell cortex. Cell projection, ruffle membrane. Cell projection, growth cone. Cell projection, stereocilium {ECO:0000250, ECO:0000250|UniProtKB:Q08509}. Synapse, synaptosome Note=Localizes at the tips of the stereocilia of the inner and outer hair cells (By similarity). Localizes to the midzone of dividing cells {ECO:0000250, ECO:0000250|UniProtKB:Q08509}

Tissue Location

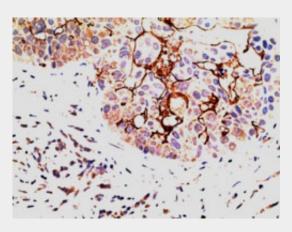
Expressed in all tissues analyzed, including heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas Expressed in all epithelial and fibroblastic lines examined and in some, but not all, hematopoietic cells

EPS8 Antibody (C-Term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

EPS8 Antibody (C-Term) - Images



AF2362a (5 µg/ml) staining of paraffin embedded Human Breast Carcinoma. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

EPS8 Antibody (C-Term) - References





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Eps8, a substrate for the epidermal growth factor receptor kinase, enhances EGF-dependent mitogenic signals. Fazioli F, Minichiello L, Matoska V, Castagnino P, Miki T, Wong WT, Di Fiore PP. EMBO J. 1993 Oct;12(10):3799-808. PMID: 8404850