Technical Data Sheet

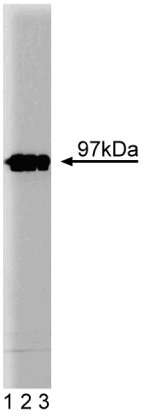
Purified Mouse Anti-Eps8

Product Information

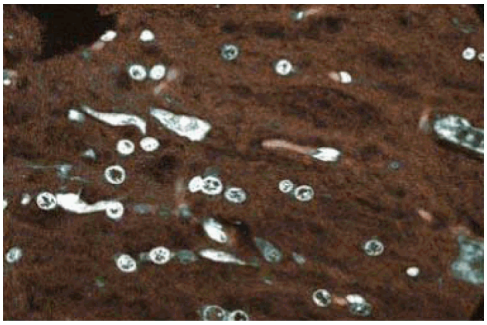
Material Number:	**610144**
Size:	150 µg
Concentration:	250 µg/ml
Clone:	15/Eps8
Immunogen:	Mouse Eps8 aa. 628-821
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Mouse Tested in Development: Human, Rat, Dog
Target MW:	97 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

The p97 [Eps8] protein, a substrate for EGF-R tyrosine kinase, contains an SH3 domain, but lacks a functional SH2 domain. Antibodies to Eps8 recognize the 97 kDa protein and a less abundant 68 kDa protein. Both forms are tyrosine-phosphorylated following treatment of cells with EGF. It is likely that p68 [Eps8] is synthesized from an alternatively spliced mRNA since two major Eps8-specific mRNAs are detected by Northern analysis. Co-immunoprecipitation studies have demonstrated a physical association between the Eps8 protein and the EGF-R both in vivo and in vitro. For many EGF-R substrates, this interaction is mediated through an SH2 domain of the substrate. Since Eps8 lacks a well defined SH2 domain and a fusion protein containing the SH2-like region of Eps8 could not bind EGF-R, the mechanism of Eps8-EGF-R association remains unclear. Overexpression of Eps8 in fibroblasts and hematopoietic cells results in an increased mitogenic response to EGF, suggesting that Eps8 has a role in the modulation of EGF-R function.



Western blot analysis of Eps8 on a lysate from mouse macrophages (RAW 264.7) treated with 10 ng/mL IFNγ and 1 µg/mL LPS for 12 hours. *Lane 1: 1:5000, lane 2: 1: 10,000, lane 3: 1:20,000 dilution of the mouse anti-Eps8 antibody.*



Immunofluorescence staining of rabbit cerebellum.

Preparation and Storage

Store undiluted at -20°C.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Application Notes

Application	
Western blot	Routinely Tested

BD Biosciences

bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	888.259.0187	32.53.720.550	0120.8555.90	65.6861.0633	55.11.5185.9995

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Immunofluorescence	Tested During Development
Immunohistochemistry	Tested During Development
Immunoprecipitation	Tested During Development

Recommended Assay Procedure:

Western blot: Please refer to http://www.bdbiosciences.com/pharmingen/protocols/Western_Blotting.shtml

Suggested Companion Products

Catalog Number	Name	Size	Clone
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)
554001	FITC Goat Anti-Mouse Ig	0.5 mg	Polyclonal
611473	Mouse Macrophage + IFNγ/LPS Lysate	500 µg	(none)

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
3. 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.
4. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

Burke P, Schooler K, Wiley HS. Regulation of epidermal growth factor receptor signaling by endocytosis and intracellular trafficking. *Mol Cell Biol.* 2001; 12(6):1897-1910. (Biology: Western blot)

Fazioli F, Minichiello L, Matoska V. Eps8, a substrate for the epidermal growth factor receptor kinase, enhances EGF-dependent mitogenic signals. *Science.* 1993; 12(10):3799-3808. (Biology)

Miyamoto S, Teramoto H, Gutkind JS, Yamada KM. Integrins can collaborate with growth factors for phosphorylation of receptor tyrosine kinases and MAP kinase activation: roles of integrin aggregation and occupancy of receptors. *J Cell Biol.* 1996; 135(6 pt 1):1633-1642. (Biology: Western blot)

Xie QW, Cho HJ, Calaycay J, et al. Cloning and characterization of inducible nitric oxide synthase from mouse macrophages. *Science.* 1992; 256(5054):225-228. (Biology)