



20150116ML

Anti-Mouse Ephrin-B1 (#12A31)

**FOR RESEARCH ONLY! NOT FOR HUMAN USE!**

Cat.-no.:	103-M378
Size:	100 µg
Lot. No.:	According to product label

Preparation: This antibody was produced from a hybridoma (mouse myeloma fused with spleen cells from a rat) immunized with mouse recombinant protein of Ephrin-B1.

Target Background

Synonyms (Target):	Efnb1; Epl2; EFL-3; Elk-L; Eplg2; Lerk2; Stra1; Cek5-L; LERK-2
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EphrinB1, also known as LERK2, ELKL, EFL3, Cek5L, and STRA1, is a member of the ephrin ligand family which binds members of the Eph receptor family. All ligands share a conserved extracellular sequence, which most likely corresponds to the receptor binding domain. This conserved sequence consists of approximately 125 amino acids and includes four invariant cysteines. The Bclass ligands are transmembrane proteins which can become tyrosine phosphorylated upon receptor ligation. The cytoplasmic domains are approximately 80 amino acids long and are highly conserved, especially the last 33 amino acids. Several signaling molecules have been shown to interact with the cytoplasmic region, although specific signaling roles have yet to be elucidated. EphrinB1 has been shown to bind EphA3, EphB1, EphB2, EphB3, and EphB4. The extracellular domains of human and mouse EphrinB1 share 94% amino acid identity. Only membranebound or Fc-clustered ligands are capable of activating the receptor in vitro. Soluble monomeric ligands bind the receptor but do not induce receptor autophosphorylation and activation. In vivo, the ligands and receptors display reciprocal expression. It has been found that nearly all receptors and ligands are expressed in developing and adult neural tissue. The Eph/ephrin families also appear to play a role in angiogenesis.

Database References Target

Protein RefSeq:	NP_034240.1
Uniprot ID:	P52795
mRNA RefSeq:	NM_010110.4

Product Specifications

Host	Rat
Reactivity against	Mouse
Clonality	Monoclonal Antibody
Clone	(#12A31)
Isotype	IgG2
Purification	Protein G/A chromatography
Antigen	recombinant mouse protein Ephrin-B1
Formulation	lyophilized
Reconstitution buffer	PBS (sterile)

Reconstitution: Reconstitute the antibody with 200 µl sterile PBS and the final concentration is 500 µg/ml.

Stability: Lyophilized samples are stable for 2 years from date of receipt when stored at -70°C. Reconstituted antibody can be aliquoted and stored frozen at < -20 °C for at least for six months without detectable loss of activity.

Remarks: This antibody detects specifically mouse Ephrin-B1 with WB.

**AVOID REPEATED FREEZE AND THAW CYCLES!**

Applications

The antibody can be used within the following applications:

WB

Recommended usage:

WB: 1:250-1000

NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!