



20180221BB

Anti-Mouse EphA7 (#6E1)

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

Cat.-no.:	103-M170
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 recombinant mouse EphA7 extracellular domain. IgG1 fraction of the culture supernatant was purified by Protein A/G affinity chromatography.

Target Background

Synonyms (Target):	Epha7; Ebk; Ehk3; Mdk1; Cek11; Hek11
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EphA7, also known as Mdk1, Hek11, Ehk3, Ebk, and Cek11, is a member of the Eph receptor family which binds members of the ephrin ligand family. There are two classes of receptors, designated A and B. Both the A and B class receptors have an extracellular region consisting of a globular domain, a cysteine rich domain, and two fibronectin type III domains. This is followed by the transmembrane region and the cytoplasmic region. The cytoplasmic region contains a juxtamembrane motif with two tyrosine residues, which are the major autophosphorylation sites, a kinase domain, and a conserved sterile alpha motif (SAM) in the carboxy tail which contains one conserved tyrosine residue. Activation of kinase activity occurs after ligand recognition and binding. EphA7 has been shown to bind ephrinA2, ephrinA3, ephrinA1, ephrinA4, and ephrinA5. The extracellular domains of human and mouse EphA7 share greater than 97% amino acid identity. Only membranebound or Fc-clustered ligands are capable of activating the receptor in vitro. While soluble monomeric ligands bind the receptor, they 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_034271.3
Uniprot ID:	Q61772
mRNA RefSeq:	NM_010141.3

Product Specifications

Host	Rat
Reactivity against	Mouse
Clonality	Monoclonal Antibody
Clone	(#6E1)
Isotype	IgG1
Purification	Protein G/A chromatography
Antigen	Recombinant mouse EphA7 extracellular domain
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 was selected for its ability to detect mouse EphA7 in western blots. In this format, this antibody does not cross-react with recombinant mouse EphA2, EphA3, EphA4, EphA6, EphA8 and EphB2, EphB3, and EphB4.

**AVOID REPEATED FREEZE AND THAW CYCLES!**

Applications

The antibody can be used within the following applications:

WB, IHC

Recommended usage:

Western Blot: 1:100 - 1000

IHC (Paraffin): 1:100 - 200

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



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Handling/Applications

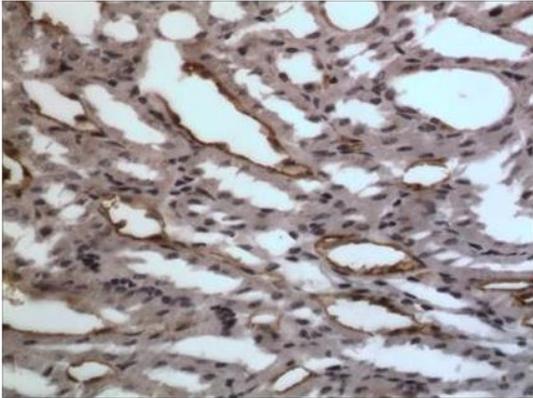


Fig. 1: The Kidney tissue samples from the Folic Acid induced kidney injury model were fixed using 4% PFA at 4C for overnight and embedded in paraffin. A 4 μ m section was subjected to IHC (1:100-200).
Antigen retrieval: Citrate Buffer, Microwave