

## Product datasheet for **TA389127**

### EPHA4 Mouse Antibody [Clone ID: M280]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	M280
Applications:	WB
Recommended Dilution:	<b>WB:</b> 1:1000
Reactivity:	Human, Rat, Mouse, Chicken
Host:	Mouse
Isotype:	IgG1
Immunogen:	Clone M280 was generated from a recombinant protein corresponding to amino acids in the N-terminal region of human EphA4. This region has less than 50% homology to similar regions in other EphA and EphB family members.
Specificity:	This antibody detects 95 and 120 kDa* bands corresponding to EphA4 in Western blots of HUVEC cells and a 120 kDa band in mouse brain tissue.
Formulation:	PBS + 1 mg/ml BSA, 0.05% NaN <sub>3</sub> and 50% glycerol
Concentration:	lot specific
Purification:	Protein A Purified
Conjugation:	Unconjugated
Storage:	Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at -20°C.
Stability:	After date of receipt, stable for at least 1 year at -20°C.
Predicted Protein Size:	95/120
Database Link:	<a href="#">P54764</a>



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**Background:**

The Eph family of Receptor tyrosine kinases and their Ephrin ligands are important for cell positioning and morphogenesis during development. Eph receptors are classified into 10 EphA and 6 EphB receptors, which preferentially bind to the type A and type B ephrins, respectively. The EphA4 receptor can inhibit axon outgrowth and has roles in regulating axon projections during neural development. EphA4 signaling pathways require its kinase activity and involve binding and activation of Rho-GTPase guanine nucleotide-exchange factors (GEFs). EphA4 activation leads autophosphorylation of Tyr-596 and Tyr-602, and the conserved sites in EphA2 are required for binding to the GEFs, Vav2 and Vav3, and ephrin-induced cell migration. The Tyr-779 site in the kinase domain is also phosphorylated in vivo and may regulate kinase activity. Activated EphA4 leads to Src kinase phosphorylation of the GEF, ephexin-1, and this activates RhoA. Thus, EphA4 signaling involves complex tyrosine phosphorylation in its cytoplasmic region along with interaction with several GEFs.

**Note:**

Protein G purified tissue culture supernatant.