

## Product datasheet for **AM11061PU-N**

### Eph receptor A5 (EPHA5) Mouse Monoclonal Antibody [Clone ID: 46CT61.6.4]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	46CT61.6.4
Applications:	IHC, WB
Recommended Dilution:	ELISA: 1/4,000. Western blotting: 1/2000. Immunohistochemistry.
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Purified His-tagged EPHA5 protein(Fragment).
Specificity:	This antibody is specific to EPHA5.
Formulation:	PBS containing 0.09% (W/V) Sodium Azide as preservative. State: Purified State: Liquid purified Ig fraction.
Concentration:	lot specific
Purification:	Protein G Chromatography eluted with high and low pH buffers and neutralized immediately, followed by dialysis against PBS.
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	EPH receptor A5
Database Link:	<a href="#">Entrez Gene 2044 Human P54756</a>



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**Background:**

EPHA5 belongs to the ephrin receptor subfamily of the protein-tyrosine kinase family. EPH and EPH-related receptors have been implicated in mediating developmental events, particularly in the nervous system. Receptors in the EPH subfamily typically have a single kinase domain and an extracellular region containing a Cys-rich domain and 2 fibronectin type III repeats. The ephrin receptors are divided into 2 groups based on the similarity of their extracellular domain sequences and their affinities for binding ephrin-A and ephrin-B ligands. Protein kinases are enzymes that transfer a phosphate group from a phosphate donor, generally the  $\gamma$  phosphate of ATP, onto an acceptor amino acid in a substrate protein. By this basic mechanism, protein kinases mediate most of the signal transduction in eukaryotic cells, regulating cellular metabolism, transcription, cell cycle progression, cytoskeletal rearrangement and cell movement, apoptosis, and differentiation. With more than 500 gene products, the protein kinase family is one of the largest families of proteins in eukaryotes. The family has been classified in 8 major groups based on sequence comparison of their tyrosine (PTK) or serine/threonine (STK) kinase catalytic domains. The tyrosine kinase (TK) group is mainly involved in the regulation of cell-cell interactions such as differentiation, adhesion, motility and death. There are currently about 90 TK genes sequenced, 58 are of receptor protein TK (e.g. EGFR, EPH, FGFR, PDGFR, TRK, and VEGFR families), and 32 of cytosolic TK (e.g. ABL, FAK, JAK, and SRC families).

**Synonyms:**

EHK1, HEK7, Ephrin type-A receptor 5

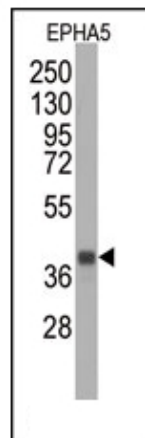
**Product images:**

Figure 1. Western blot analysis of anti-EPHA5 Monoclonal Antibody by EPHA5 recombinant protein (Fragment). EPHA5 (Fragment) protein (arrow) was detected using the purified Mab. (1:2000).

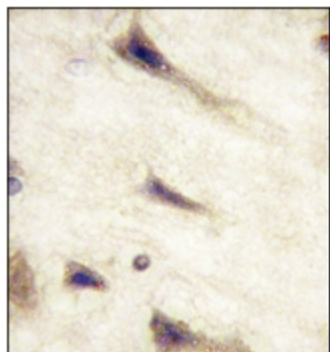


Figure 2. Formalin-fixed and paraffin-embedded human brain tissue reacted with EPHA5 Monoclonal Antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.