

## Product datasheet for **AM11064PU-N**

### Eph receptor B2 (EPHB2) Mouse Monoclonal Antibody [Clone ID: 48CT12.6.4]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	48CT12.6.4
Applications:	FC, IHC, WB
Recommended Dilution:	<b>Western blotting:</b> 1/1,000. <b>Immunohistochemistry:</b> 1/200. <b>Flow Cytometry:</b> 1/10 - 1/50.
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Purified His-tagged EPHB2 protein (Fragment between amino acids 124–425).
Specificity:	This antibody is specific to EPHB2.
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.
Predicted Protein Size:	117493 Da.
Gene Name:	EPH receptor B2
Database Link:	<a href="#">Entrez Gene 2048 Human P29323</a>



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**Background:**

Ephrin receptors and their ligands, the ephrins, mediate numerous developmental processes, particularly in the nervous system. Based on their structures and sequence relationships, ephrins are divided into the ephrin-A (EFNA) class, which are anchored to the membrane by a glycosylphosphatidylinositol linkage, and the ephrin-B (EFNB) class, which are transmembrane proteins. The Eph family of 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. Ephrin receptors make up the largest subgroup of the receptor tyrosine kinase (RTK) family. The ligand-activated form of EphB2, which belongs to the Tyr family of protein kinases, interacts with multiple proteins, including GTPase-activating protein (RASGAP) through its SH2 domain. It binds RASGAP through the juxtamembrane tyrosines residues, and also interacts with PRKCABP and GRIP1. This type I membrane protein is expressed in brain, heart, lung, kidney, placenta, pancreas, liver and skeletal muscle. It is preferentially expressed in fetal brain. This protein contains putatively 2 fibronectin type III domains and 1 sterile alpha motif (SAM) domain.

**Synonyms:**

Ephrin type-B receptor 2, DRT, EPHT3, EPTH3, ERK, HEK5, TYRO5, NY-REN-47

**Product images:**

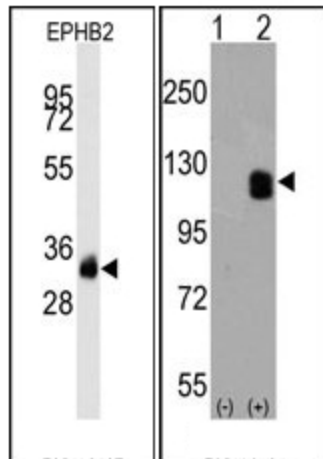


Figure 1. (LEFT) Western blot analysis of anti-EPHB2 Monoclonal Antibody by EPHB2 recombinant protein (Fragment). EPHB2 (Fragment) protein (arrow) was detected using the ascites Mab. (1:2000). (RIGHT) Western blot analysis of EPHB2 (arrow) using Mouse Monoclonal EPHB2 Antibody. 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the EPHB2 gene (Lane 2) (Origene Technologies).

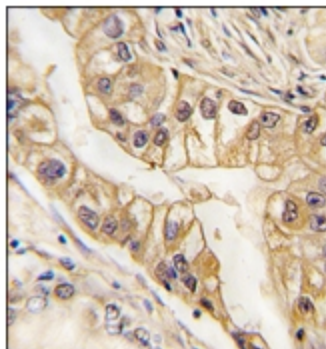


Figure 2. Formalin-fixed and paraffin-embedded human lung carcinoma tissue reacted with EPHB2 Monoclonal Antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.