

# Anti-EphA2 (Extracellular region) M060 Antibody

Catalog # AN1775

# **Specification**

### Anti-EphA2 (Extracellular region) M060 Antibody - Product Information

Primary Accession P29317 Host Mouse

Clonality Mouse Monoclonal

Isotype IgG1
Calculated MW 108266

### Anti-EphA2 (Extracellular region) M060 Antibody - Additional Information

Gene ID 1969

**Other Names** 

EphA2, P29317, Epithelial cell kinase, Tyrosine-protein kinase receptor ECK, Ephrin type-A receptor 2

#### **Target/Specificity**

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. Ephrin type-A receptor 2 (EphA2), also known as epithelial cell kinase (Eck), binds the ephrin A1 (EFNA1) ligand, and has roles in neuronal development and repair, as well as carcinogenesis. EphA2 receptor has an N-terminal ligand-binding domain followed by a cysteine-rich domain with an epidermal growth factor-like motif and two fibronectin type-III repeats in the extracellular region, and a sterile alpha motif (SAM), and a PDZ domain-binding motif in the intracellular region. EphA2 is expressed in many types of cancers, including breast, colon, bladder, gastric, and glioblastoma. In bladder cancers, EphA2 may be activated by progranulin leading to phosphorylation at Ser-897 and bladder tumorigenesis. EphA2 may be an important therapeutic target and biomarker for several types of cancer.

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

### **Precautions**

Anti-EphA2 (Extracellular region) M060 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

#### **Shipping**

Blue Ice

### Anti-EphA2 (Extracellular region) M060 Antibody - Protocols

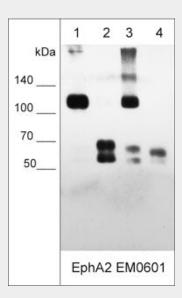
Provided below are standard protocols that you may find useful for product applications.

Western Blot

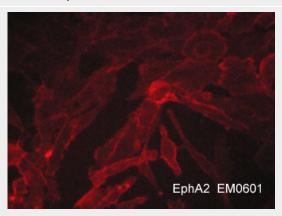


- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# Anti-EphA2 (Extracellular region) M060 Antibody - Images

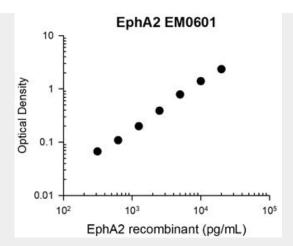


Western blot of human MDA-MB-231 breast carcinoma (lane 1), A431 epidermoid carcinoma (lane 2), NCI-H2052 epithelioid mesothelioma (lane 3), and A549 lung carcinoma (lane 4). The blot was probed with mouse monoclonal anti-EphA2 (EM0601) at 1:500.



Immunocytochemical labeling of EphA2 in aldehyde fixed human MDA-MB-231 breast carcinoma cells. The cells were labeled with mouse monoclonal anti-EphA2 (EM0601). The antibody was detected using goat anti-mouse DyLight® 594.





Representative Standard Curve using mouse monoclonal anti-EphA2 (EM0601) for ELISA capture of human recombinant EphA2 extracellular region with a His-tag. Captured protein was detected by suitable anti-His-tag antibody followed by appropriate secondary antibody HRP conjugate.

## Anti-EphA2 (Extracellular region) M060 Antibody - 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. Ephrin type-A receptor 2 (EphA2), also known as epithelial cell kinase (Eck), binds the ephrin A1 (EFNA1) ligand, and has roles in neuronal development and repair, as well as carcinogenesis. EphA2 receptor has an N-terminal ligand-binding domain followed by a cysteine-rich domain with an epidermal growth factor-like motif and two fibronectin type-III repeats in the extracellular region, and a sterile alpha motif (SAM), and a PDZ domain-binding motif in the intracellular region. EphA2 is expressed in many types of cancers, including breast, colon, bladder, gastric, and glioblastoma. In bladder cancers, EphA2 may be activated by progranulin leading to phosphorylation at Ser-897 and bladder tumorigenesis. EphA2 may be an important therapeutic target and biomarker for several types of cancer.