10320 Camino Santa Fe, Suite G
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Tel: 858.875.1900 Fax: 858.875.1999

Anti-EphA2 (Extracellular region) M049 Antibody
Catalog # AN1774

Specification

Anti-EphA2 (Extracellular region) M049 Antibody - Product Information

Application	**WB**
Primary Accession	P29317
Host	**Mouse**
Clonality	**Mouse Monoclonal**
Isotype	**IgG1**
Calculated MW	**108266**

Anti-EphA2 (Extracellular region) M049 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.

Dilution
WB~~1:1000

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) M049 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping
Blue Ice

Anti-EphA2 (Extracellular region) M049 Antibody - Protocols

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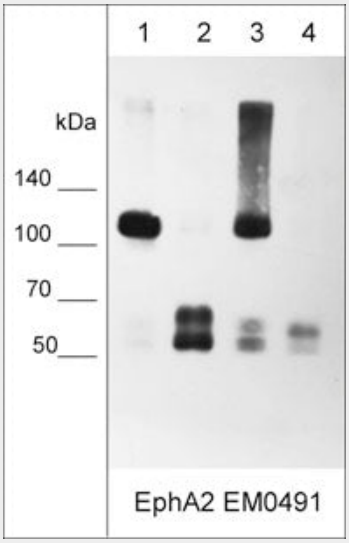
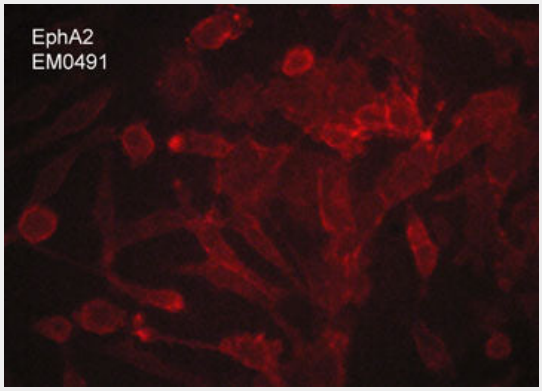
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-EphA2 (Extracellular region) M049 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 (EM0491) at 1:1000.



Immunocytochemical labeling of EphA2 in aldehyde fixed human MDA-MB-231 breast carcinoma cells. The cells were labeled with mouse monoclonal anti-EphA2 (EM0491). The antibody was detected using goat anti-mouse DyLight® 594.

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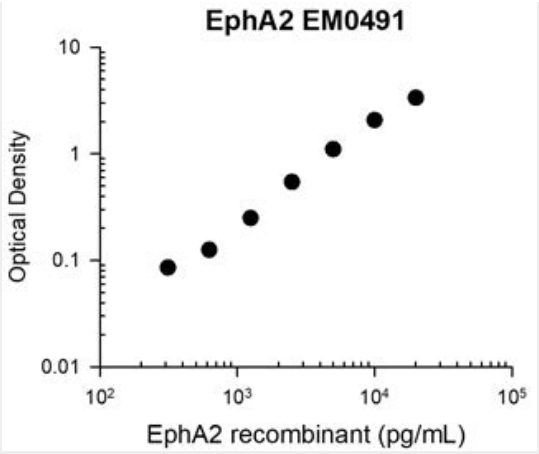

Representative Standard Curve using mouse monoclonal anti-EphA2 (EM0491) for ELISA capture of human recombinant EphA2 extracellular region with a His-tag. Captured protein was detected by suitable anti-His-tag antibody followed by appropriate secondary antibody HRP conjugate.

Anti-EphA2 (Extracellular region) M049 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.