



**Qty:** 100 µg/200 µL

Mouse anti-EphA2 Receptor

**Catalog No.** 37-4400

**Lot No.**

## Mouse anti-EphA2 Receptor

### FORM

This monoclonal antibody is supplied as a 200 µL aliquot at a concentration of 0.5 mg/mL in PBS, pH 7.4, containing 0.1% sodium azide. This antibody is highly purified from mouse ascites by protein A chromatography.

**CLONE:** 1C11A12

**ISOTYPE:** Mouse IgG<sub>1</sub>, kappa

### IMMUNOGEN

Synthetic peptide derived from the C-terminal region of the human EphA2 Receptor protein.

### SPECIFICITY

This antibody is specific for the C-terminal region of the EphA2 Receptor protein. On Western blots, it identifies the target band at ~120 kDa.

### REACTIVITY

Reactivity has been confirmed with human EphA2-transfected 293 and MDA-MB-231 cells. Based on amino acid homology, reactivity with mouse and rat is also expected.

Sample	Immuno-precipitation (native)	Western Blotting	ELISA
Human	++	++	ND
Mouse	++	++	ND
Rat	++	++	ND
Immunogen	N/A	N/A	+++

(Excellent +++, Good++, Poor +, No reactivity 0, Not applicable N/A, Not Determined ND)

### USAGE

Working concentrations for specific applications should be determined by the investigator. Appropriate concentrations will be affected by several factors, including secondary antibody affinity, antigen concentration, sensitivity of detection method, temperature and length of incubations, etc. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

**Immunoprecipitation:** 5 µg/reaction

**Western Blotting:** 1-3 µg/mL

### STORAGE

Store at 2-8°C for up to one month. Store at -20°C for long-term storage. Avoid repeated freezing and thawing.

(cont'd)

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**BACKGROUND**

The Eph receptors are the largest family of tyrosine kinases.<sup>1-3</sup> They can be grouped into two subclasses based upon sequence homology: the EphA and EphB receptors. The ligands for the Eph receptors are the ephrins. The EphA receptors bind ephrin-A ligands, which are tethered to the membrane by a GPI linkage, and the EphB receptors bind ephrin-B ligands, which have a membrane spanning region. The Eph receptors are widely expressed during embryonic development, including in the nervous and vascular systems. Ephrins and Eph receptors have been implicated in many developmental processes, including neuronal network formation, guidance of cell migration and axonal pathfinding.<sup>4,5</sup> They remain expressed at lower levels in adult tissues, and are upregulated in pathological conditions such as cancer.

EphA2 has been previously named Eck, Myk2 and Sek2. It binds to ephrin-A1, -A3, -A4 and -A5, and is expressed most highly in tissues that contain a high proportion of epithelial cells, e.g. skin, intestine, lung and ovary.<sup>6</sup>

**REFERENCES**

1. Pasquale EB. *Curr Opin Cell Biol* 9(5):608-615, 1997.
2. Holder N & Klein R. *Development* 126(10):2033-2044, 1999.
3. The Eph Nomenclature Committee. *Cell* 90(3):403-404, 1997.
4. Flanagan JG & Vanderhaeghe P. *Annu Rev Neurosci* 21:309-345, 1998.
5. Murai KK, et al. *Nature Neurosci* 6(2):153-160, 2003.
6. Lindberg RA & Hunter T. *Mol Cell Biol* 10:6316-6324, 1990.

**RELATED PRODUCTS**

<b>Product</b>	<b>Conjugate</b>	<b>Cat. No.</b>
Protein A	Sepharose <sup>®</sup> 4B	10-1041
rec-Protein G	Sepharose <sup>®</sup> 4B	10-1241

<b>Conjugate</b>	<b>ZyMAX<sup>™</sup> Goat x Rabbit IgG (H+L)</b>	<b>ZyMAX<sup>™</sup> Goat x Mouse IgG (H+L)</b>
Purified	81-6100	81-6500
FITC	81-6111	81-6511
TRITC	81-6114	81-6514
Cy <sup>™</sup> 3	81-6115	81-6515
Cy <sup>™</sup> 5	81-6116	81-6516
HRP	81-6120	81-6520
AP	81-6122	81-6522
Biotin	81-6140	81-6540

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