



**Qty:** 100 µg/400 µl

Rabbit anti-EphA2 Receptor

**Catalog No.** 34-7400

**Lot No.** See product label

## Rabbit anti-EphA2 Receptor

### FORM

This polyclonal antibody is supplied as a 400 µl aliquot at a concentration of 0.25 mg/ml in phosphate buffered saline (pH 7.4) containing 0.1% sodium azide. The antibody is epitope-affinity-purified from rabbit antiserum.

**PAD:** ZMD.224

### IMMUNOGEN

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

### SPECIFICITY

This antibody reacts with the ~120 kDa human EphA2 receptor.

### REACTIVITY

Reactivity is confirmed with human HEK 293 cells carrying an expression vector encoding the human EphA2 receptor. No cross reactivity was observed with human EphA3, EphA4, or EphB4 receptors by Western blotting.

Sample	Western Blotting	Immuno-precipitation (native)
Human	+++	++
Mouse	ND	ND
Rat	ND	ND

(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:** 2-5 µg/ml

**Western Blotting:** 1-5 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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PI347400

(Rev 10/08) DCC-08-1089

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**BACKGROUND**

Eph receptors belong to a family of receptor tyrosine kinases. Both ephrins, the ligands for Eph receptors, and Eph receptors are broadly expressed throughout the ectoderm, mesoderm, and endoderm of vertebrate embryos.<sup>1</sup> The interaction of ephrins with the appropriate Eph receptor(s) has been implicated in a wide spectrum of functions in vertebrate morphogenesis, including the accurate migration of embryonic cells,<sup>2</sup> formation of boundaries between structures (i.e. rhombomeres and somites), and the control of cytoskeletal changes which dictate cellular shape and adhesion during development.

The EphA2 receptor (also called Eck, Myk2 and Sek2), has been implicated in cancer<sup>3</sup> and is reportedly overexpressed in melanoma cell lines but not in normal melanocytes<sup>4</sup>. Furthermore, EphA2 has been suggested as a therapeutic target for certain aggressive carcinomas, as antibodies against EphA2 receptor have been observed to inhibit growth of MDA-MB-231 breast tumor cells<sup>7</sup>. Ligands known to interact with EphA2 include ephrins A1, A3, A4 A5<sup>5</sup> and PI3-Kinase<sup>6</sup>.

**REFERENCES**

1. Holder N, Klein R. *Development* 126(10):2033-2044, 1999.
2. Flanagan JG, Vandehaeghen P. *Annu Rev Neurosci* 21:309-345, 1998.
3. Ogawa K et al. *Oncogene* 19(52):6043-6052, 2000.
4. Easty DJ et al. *Int J Cancer* 84(5):494-501, 1999.
5. Pasquale EB. *Curr Opin Cell Biol* 9(5):608-615, 1997.
6. Pandey A et al. *J Biol Chem* 269:30154-30157, 1994.
7. Carles-Kinch et al. *Cancer Res* 62(10):2840-2847, 2002.

**RELATED PRODUCTS**

<b>Product</b>	<b>Clone/PAD*</b>	<b>Cat. No.</b>
Rabbit anti-Ephrin B1	ZMD.41	34-3500
Rabbit anti-Ephrin B1	ZMD.41	18-2304
Rabbit anti-Ephrin A1	ZMD.39	34-3300
Rabbit anti-Ephrin A1	ZMD.39	18-2301
Rabbit anti-Ephrin A2	ZMD.40	34-3400
Rabbit anti-Ephrin A2	ZMD.40	18-2302
Rabbit anti-Ephrin A4	ZMD.56	34-3700
Rabbit anti-Ephrin A4	ZMD.56	18-2303
Rabbit anti-Ephrin B3	ZMD.42	34-3600
Rabbit anti-Ephrin B3	ZMD.42	18-2305
Mouse anti-Chicken Ephrin B1	11B3	35-5900
Rabbit anti-Chicken EphB5 Receptor	ZMD.225	34-7500
Protein A	Sepharose® 4B	10-1041
rec-Protein G	Sepharose® 4B	10-1241

\*PAD: Polyclonal Antibody Designation

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

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