



**Qty:** 100 µg/200 µl

Mouse anti-EphB4 Receptor

**Catalog No.** 35-2900

**Lot No.**

## Mouse anti-EphB4 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:** 3D7F8

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

### IMMUNOGEN

Recombinant protein corresponding to the C-terminal sequence of the human EphB4 receptor.

### SPECIFICITY

This antibody reacts with the human EphB4 receptor protein.

### REACTIVITY

Reactivity is confirmed with human breast carcinoma cell line MDA-MB-231, and 293 cells carrying an expression vector encoding human EphB4 receptor.

Sample	Western Blotting	ELISA
Human	+++	ND
Mouse	ND	ND
Rat	ND	ND
Immunogen	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.

**ELISA:** 0.1-1 µg/ml  
**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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PI352900

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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 EphB4 receptor, also known as Htk, Myk1, Tyro11 and Mdk2, was originally identified in CD34+ cells in the bone marrow and has since also been found in erythroid progenitor cells<sup>1</sup>. The interaction between the EphB4 receptor and its ligand, ephrin B2, is critical for embryonic capillary morphogenesis. Upregulation of the EphB4 receptor has been observed in colon carcinoma<sup>2-3</sup>, and in endometrial cancer<sup>4</sup>.

## REFERENCES

1. Wang Z, et al. *Blood* 99(8):2740-2747, 2002.
2. Liu W, et al. *Cancer* 94(4):934-9, 2002.
3. Stephenson SA, et al. *BMC Mol Biol.* 2(1):15, 2001.
4. Takai N, et al. *Oncol Rep* 8(3):567-573, 2001.

## 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	ZMD.225	34-7500
Rabbit anti-EphA2	ZMD.224	34-7400
Mouse anti-Chicken EphB5 Receptor	5G6H8	35-3000
Rabbit anti-EphA4 Receptor	ZMD.229	34-7900

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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