

EphA5 (8B10B1): sc-517242

BACKGROUND

The Eph subfamily represents the largest group of receptor protein tyrosine kinases identified to date. While the biological activities of these receptors have yet to be determined, there is increasing evidence that they are involved in central nervous system function and in development. The Eph subfamily receptors of human origin (and their murine/avian homologs) include EphA1 (Eph), EphA2 (Eck), EphA3 (Hek4), EphA4 (Hek8), EphA5 (Hek7), EphA6 (Hek12), EphA7 (Hek11/MDK1), EphA8 (Hek3), EphB1 (Hek6), EphB2 (Hek5), EphB3 (Cek10, Hek2), EphB4 (Htk), EphB5 (Hek9) and EphB6 (Mep). Ligands for Eph receptors include ephrin-A4 (LERK-4) which binds EphA3 and EphB1. ephrin-A2 (ELF-1) has been described as the ligand for EphA4, ephrin-A3 (Ehk1-L) as the ligand for EphA5 and ephrin-B2 (Htk-L) as the ligand for EphB4 (Htk).

REFERENCES

1. Beckmann, M.P., et al. 1994. Molecular characterization of a family of ligands for Eph-related tyrosine kinase receptors. *EMBO J.* 13: 3757-3762.
2. Cheng, H.J., et al. 1994. Identification and cloning of ELF-1, a developmentally expressed ligand for the Mek4 and Sek receptor tyrosine kinases. *Cell* 79: 157-168.
3. Ciossek, T., et al. 1995. Identification of alternatively spliced mRNAs encoding variants of MDK1, a novel receptor tyrosine kinase expressed in the murine nervous system. *Oncogene* 10: 97-108.
4. Kozlosky, C.J., et al. 1995. Ligands for the receptor tyrosine kinases hek and elk: isolation of cDNAs encoding a family of proteins. *Oncogene* 10: 299-306.
5. Fox, G.M., et al. 1995. DNA cloning and tissue distribution of five human Eph-like receptor protein-tyrosine kinases. *Oncogene* 10: 897-905.
6. Valenzuela, D.M., et al. 1995. Identification of full length and truncated forms of Ehk-3, a novel member of the Eph receptor tyrosine kinase family. *Oncogene* 10: 1573-1580.
7. Bennett, B.D., et al. 1995. Molecular cloning of a ligand for the Eph-related receptor protein-tyrosine kinase Htk. *Proc. Natl. Acad. Sci. USA* 92: 1866-1870.

CHROMOSOMAL LOCATION

Genetic locus: EPHA5 (human) mapping to 4q13.1.

SOURCE

EphA5 (8B10B1) is a mouse monoclonal antibody raised against a recombinant protein corresponding to amino acids 620-774 of EphA5 of human origin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

EphA5 (8B10B1) is available conjugated to agarose (sc-517242 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-517242 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-517242 PE), fluorescein (sc-517242 FITC), Alexa Fluor® 488 (sc-517242 AF488), Alexa Fluor® 546 (sc-517242 AF546), Alexa Fluor® 594 (sc-517242 AF594) or Alexa Fluor® 647 (sc-517242 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-517242 AF680) or Alexa Fluor® 790 (sc-517242 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

EphA5 (8B10B1) is recommended for detection of EphA5 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for EphA5 siRNA (h): sc-39938, EphA5 shRNA Plasmid (h): sc-39938-SH and EphA5 shRNA (h) Lentiviral Particles: sc-39938-V.

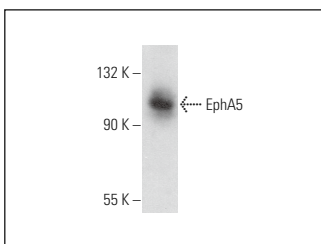
Molecular Weight of EphA5: 130 kDa.

Positive Controls: IMR-32 cell lysate: sc-2409 or U-87 MG cell lysate: sc-2411.

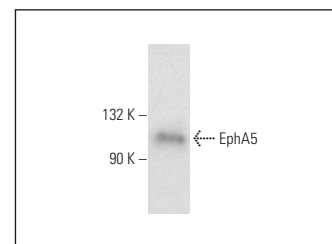
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



EphA5 (8B10B1): sc-517242. Western blot analysis of EphA5 expression in U-87 MG whole cell lysate.



EphA5 (8B10B1): sc-517242. Western blot analysis of EphA5 expression in IMR-32 whole cell lysate.

RESEARCH USE

For research use only, not for use in diagnostic procedures.