

EphA2 (H-77): sc-10746

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

- 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.
- Beckmann, M.P., et al. 1994. Molecular characterization of a family of ligands for Eph-related tyrosine kinase receptors. *EMBO J.* 13: 3757-3762.

CHROMOSOMAL LOCATION

Genetic locus: EPHA2 (human) mapping to 1p36.13; EphA2 (mouse) mapping to 4 E1.

SOURCE

EphA2 (H-77) is a rabbit polyclonal antibody raised against amino acids 422-498 mapping to an internal region of EphA2 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

EphA2 (H-77) is recommended for detection of EphA2 of mouse, rat, human, and mink 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)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

EphA2 (H-77) is also recommended for detection of EphA2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for EphA2 siRNA (h): sc-29304, EphA2 siRNA (m): sc-35320, EphA2 shRNA Plasmid (h): sc-29304-SH, EphA2 shRNA Plasmid (m): sc-35320-SH, EphA2 shRNA (h) Lentiviral Particles: sc-29304-V and EphA2 shRNA (m) Lentiviral Particles: sc-35320-V.

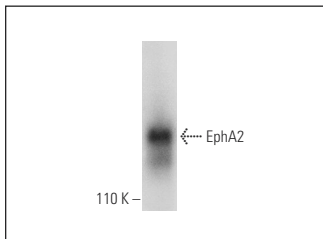
Molecular Weight of EphA2: 130 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210, A549 cell lysate: sc-2413 or mouse brain extract: sc-2253.

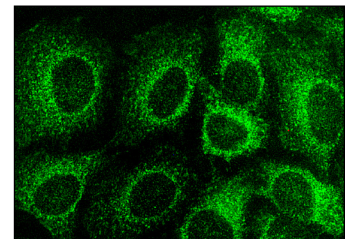
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/ 2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



EphA2 (H-77): sc-10746. Western blot analysis of EphA2 expression in mouse brain tissue extract.



EphA2 (H-77): sc-10746. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

SELECT PRODUCT CITATIONS

- Brittis, P.A., et al. 2002. Axonal protein synthesis provides a mechanism for localized regulation at an intermediate target. *Cell* 110: 223-235.
- Tatsumi, T., et al. 2003. Disease stage variation in CD4⁺ and CD8⁺ T-cell reactivity to the receptor tyrosine kinase EphA2 in patients with renal cell carcinoma. *Cancer Res.* 63: 4481-4489.
- Tachado, S.D., et al. 2005. HIV impairs TNF α release in response to Toll-like receptor 4 stimulation in human macrophages *in vitro*. *Am. J. Respir. Cell Mol. Biol.* 33: 610-621.
- Mudali, S.V., et al. 2006. Patterns of EphA2 protein expression in primary and metastatic pancreatic carcinoma and correlation with genetic status. *Clin. Exp. Metastasis* 23: 357-365.

STORAGE

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

RESEARCH USE

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



Try **EphA2 (C-3): sc-398832** or **EphA2 (3D7): sc-135658**, our highly recommended monoclonal alternatives to EphA2 (H-77). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **EphA2 (C-3): sc-398832**.