# SANTA CRUZ BIOTECHNOLOGY, INC.

# EphA5 (H-60): sc-25458



# 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 EphrinA4 (LERK-4) which binds EphA3 and EphB1. EphrinA2 (ELF-1) has been described as the ligand for EphA4, EphB4 (Htk).

#### REFERENCES

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

#### CHROMOSOMAL LOCATION

Genetic locus: EPHA5 (human) mapping to 4q13.1; Epha5 (mouse) mapping to 5 E1.

## SOURCE

EphA5 (H-60) is a rabbit polyclonal antibody raised against amino acids 561-620 of EphA5 of human origin.

## PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

# APPLICATIONS

EphA5 (H-60) is recommended for detection of EphA5 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

EphA5 (H-60) is also recommended for detection of EphA5 in additional species, including bovine and canine.

Suitable for use as control antibody for EphA5 siRNA (h): sc-39938, EphA5 siRNA (m): sc-39939, EphA5 shRNA Plasmid (h): sc-39938-SH, EphA5 shRNA Plasmid (m): sc-39939-SH, EphA5 shRNA (h) Lentiviral Particles: sc-39938-V and EphA5 shRNA (m) Lentiviral Particles: sc-39939-V.

Molecular Weight of EphA5: 130 kDa.

Positive Controls: mouse brain extract: sc-2253 or U-87 MG whole cell lysate: sc-2411.

#### **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<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941.

#### DATA



EphA5 (H-60). sc-25458. Western blot analysis of EphA5 expression in U-87 MG whole cell lysate.

# SELECT PRODUCT CITATIONS

 Fu, D.Y., et al. 2010. Frequent epigenetic inactivation of the receptor tyrosine kinase EphA5 by promoter methylation in human breast cancer. Hum. Pathol. 41: 48-58.

# **STORAGE**

Store at 4° C, \*\*D0 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.

#### PROTOCOLS

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

# MONOS Tr Satisfation Mu Guaranteed

Try **EphA5 (YT-12): sc-73947**, our highly recommended monoclonal alternative to EphA5 (H-60).