SANTA CRUZ BIOTECHNOLOGY, INC.

EphA5 (L-15): sc-1014

SANTA CRUZ BIOTECHNOLOGY
The Power to Question

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).

CHROMOSOMAL LOCATION

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

SOURCE

EphA5 (L-15) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of EphA5 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.

Blocking peptide available for competition studies, sc-1014 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

EphA5 (L-15) is recommended for detection of EphA5 of mouse, rat, human, and chicken 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).

EphA5 (L-15) is also recommended for detection of EphA5 in additional species, including equine, canine, bovine and avian.

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: rat brain extract: sc-2392, mouse brain extract: sc-2253 or U-87 MG cell lysate: sc-2411.

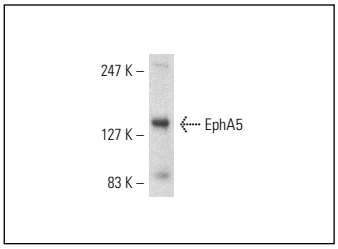
STORAGE

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.

DATA



EphA5 (L-15): sc-1014. Western blot analysis of EphA5 expression in rat brain tissue extract.

SELECT PRODUCT CITATIONS

1. Sieber, B.A., et al. 2004. Disruption of EphA/ephrin-A signaling in the nigrostriatal system reduces dopaminergic innervation and dissociates behavioral responses to amphetamine and cocaine. Mol. Cell. Neurosci. 26: 418-428.
2. Yuan, Z.L., et al. 2004. Central role of the threonine residue within the p+1 loop of receptor tyrosine kinase in Stat3 constitutive phosphorylation in metastatic cancer cells. Mol. Cell. Biol. 24: 9390-9400.
3. Warchol, M.E. 2007. Characterization of supporting cell phenotype in the avian inner ear: implications for sensory regeneration. Hear. Res. 227: 11-18.
4. Cooper, M.A., et al. 2009. Distribution of EphA5 receptor protein in the developing and adult mouse nervous system. J. Comp. Neurol. 514: 310-328.
5. Almog, N., et al. 2009. Transcriptional switch of dormant tumors to fast-growing angiogenic phenotype. Cancer Res. 69: 836-844.

PROTOCOLS

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