SANTA CRUZ BIOTECHNOLOGY, INC.

ephrin-A3 (H-90): sc-20720

SANTA CRUZ BIOTECHNOLOGY
The Power to Question

BACKGROUND

The Eph subfamily represents the largest group of receptor protein kinases identified to date. There is increasing evidence that they are involved in central nervous system function and in development. Ligands for Eph receptors include ephrin-A1 (LERK-1/B61), identified as a ligand for the EphA2 (Eck) receptor; ephrin-A2 (ELF-1), identified as a ligand for the EphA3 and EphA4 (Sek) receptors; ephrin-A3 (LERK-3), identified as a ligand for EphA5 (Ehk1) and EphA3 (Hek) receptors; ephrin-A4 (LERK-4), identified as a ligand for the EphA3 receptor; ephrin-A5 (AL-1), identified as a ligand for EphA5 (REK7); ephrin-B1 (LERK-2), identified as a ligand for the EphB1 (Elk) and EphB2 (Cek5) receptors; ephrin-B2 (LERK-5), identified as a ligand for the EphB1, EphB3 (Cek10) and EphB2 receptors; and ephrin-B3 (LERK-8), identified as a ligand for EphB1.

CHROMOSOMAL LOCATION

Genetic locus: EFNA3 (human) mapping to 1q22; Efna3 (mouse) mapping to 3 F1.

SOURCE

ephrin-A3 (H-90) is a rabbit polyclonal antibody raised against amino acids 149-238 mapping at the C-terminus of ephrin-A3 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.

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.

APPLICATIONS

ephrin-A3 (H-90) is recommended for detection of ephrin-A3 of mouse, rat and 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)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

ephrin-A3 (H-90) is also recommended for detection of ephrin-A3 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ephrin-A3 siRNA (h): sc-39430, ephrin-A3 siRNA (m): sc-39431, ephrin-A3 shRNA Plasmid (h): sc-39430-SH, ephrin-A3 shRNA Plasmid (m): sc-39431-SH, ephrin-A3 shRNA (h) Lentiviral Particles: sc-39430-V and ephrin-A3 shRNA (m) Lentiviral Particles: sc-39431-V.

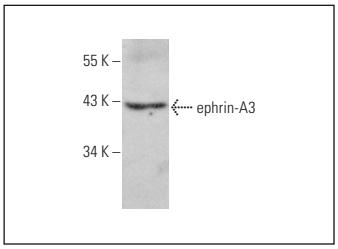
Molecular Weight of ephrin-A3: 32-38 kDa.

Positive Controls: T-47D cell lysate: sc-2293.

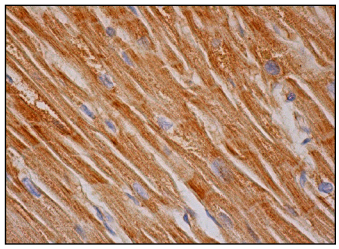
RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



ephrin-A3 (H-90): sc-20720. Western blot analysis of ephrin-A3 expression in T-47D whole cell lysate.



ephrin-A3 (H-90): sc-20720. Immunoperoxidase staining of formalin fixed, paraffin-embedded human heart muscle tissue showing cytoplasmic staining of myocytes.

SELECT PRODUCT CITATIONS

1. Millien, G., et al. 2006. Alterations in gene expression in T1 α null lung: a model of deficient alveolar sac development. BMC Dev. Biol. 6: 35.
2. Pulkkinen, K., et al. 2008. Hypoxia induces microRNA miR-210 *in vitro* and *in vivo* ephrin-A3 and neuronal pentraxin 1 are potentially regulated by miR-210. FEBS Lett. 582: 2397-2401.
3. Yamada, Y., et al. 2008. Ephrin-A3 not only increases the density of hair follicles but also accelerates anagen development in neonatal mice. J. Dermatol. Sci. 52: 178-185.

PROTOCOLS

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