bradykinin B2 R (H-50): sc-25671



The Power to Question

BACKGROUND

Kinins are important biologically active peptides that mediate cardiovascular homeostasis, inflammation and nociception. Bradykinin, the major effector peptide of the kallikrein-kinin system, is regulated by angiotensin-converting enzyme (ACE), which degrades the peptide. Bradykinin normally exerts its effects through the activation of two seven transmembrane G protein-coupled receptors, named B1 and B2. The B2 receptor is constitutively expressed and preferentially binds full length bradykinin. Deletion of the B2 receptor leads to salt-sensitive hypertension and altered nociception in mice. The B1 receptor binds to derivatives of bradykinin and kallidin, which are produced by carboxypeptidase action to generate the products des-Arg9-bradykinin and des-Arg10-kallidin, respectively. The expression of the B1 receptor is inducible by inflammatory mediators, such as bacterial lipopolysaccharide (LPS) and cytokines. The B1 and B2 receptors represent potential therapeutic targets for treatment of inflammatory disorders and cardiovascular diseases.

CHROMOSOMAL LOCATION

Genetic locus: BDKRB2 (human) mapping to 14q32.2; Bdkrb2 (mouse) mapping to 12 E.

SOURCE

bradykinin B2 R (H-50) is a rabbit polyclonal antibody raised against amino acids 342-391 of bradykinin B2 R of human origin.

PRODUCT

Each vial contains 200 μg lgG 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.

APPLICATIONS

bradykinin B2 R (H-50) is recommended for detection of bradykinin B2 receptor of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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).

Suitable for use as control antibody for bradykinin B2 R siRNA (h): sc-29822, bradykinin B2 R siRNA (m): sc-29823, bradykinin B2 R shRNA Plasmid (h): sc-29822-SH, bradykinin B2 R shRNA Plasmid (m): sc-29823-SH, bradykinin B2 R shRNA (h) Lentiviral Particles: sc-29822-V and bradykinin B2 R shRNA (m) Lentiviral Particles: sc-29823-V.

Molecular Weight of bradykinin B2 R: 44 kDa.

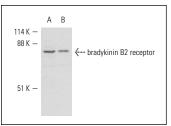
Molecular Weight of glycosylated bradykinin B2 R: 69 kDa.

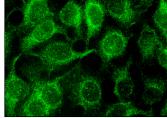
Positive Controls: NIH/3T3 whole cell lysate: sc-2210, MH-S whole cell lysate: sc-364785 or JAR cell lysate: sc-2276.

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





bradykinin B2 R (H-50): sc-25671. Western blot analysis of bradykinin B2 receptor expression in MH-S (**A**) and NIH/3T3 (**B**) whole cell lysates.

bradykinin B2 R (H-50): sc-25671. Immunofluorescence staining of methanol-fixed HeLa cells showing membrane localization.

SELECT PRODUCT CITATIONS

- Shin, H.S. and Ha, U.H. 2011. Up-regulation of bradykinin B2 receptor by Pseudomonas aeruginosa via the NF-κB pathway. Curr. Microbiol. 63: 138-144.
- 2. Cuddapah, V.A., et al. 2013. Bradykinin-induced chemotaxis of human gliomas requires the activation of KCa3.1 and ClC-3. J. Neurosci. 33: 1427-1440.

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.



Try **bradykinin B2 R (20): sc-136216**, our highly recommended monoclonal alternative to bradykinin B2 R (H-50).

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3800 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com