

bradykinin B2 R (C-20): sc-15050

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 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of bradykinin B2 R 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-15050 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

bradykinin B2 R (C-20) is recommended for detection of bradykinin B2 receptor 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).

bradykinin B2 R (C-20) is also recommended for detection of bradykinin B2 receptor in additional species, including porcine.

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.

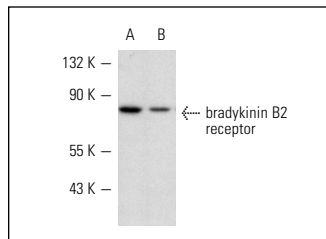
Molecular Weight of glycosylated bradykinin B2 R: 69 kDa.

Positive Controls: Mv 1 Lu cell lysate: sc-3810 or JAR cell lysate: sc-2276.

STORAGE

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

DATA



bradykinin B2 receptor (C-20): sc-15050. Western blot analysis of bradykinin B2 receptor expression in Mv 1 Lu (A) and JAR (B) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Aliberti, J., et al. 2003. Cutting edge: bradykinin induces IL-12 production by dendritic cells: a danger signal that drives Th1 polarization. *J. Immunol.* 170: 5349-5353.
2. Nagatsuka, Y., et al. 2003. Carbohydrate-dependent signaling from the phosphatidylglucoside-based microdomain induces granulocytic differentiation of HL60 cells. *Proc. Natl. Acad. Sci. USA* 100: 7454-7459.
3. Rashid, M.H., et al. 2004. Switching of bradykinin-mediated nociception following partial sciatic nerve injury in mice. *J. Pharmacol. Exp. Ther.* 308: 1158-1164.
4. Haack, K.K., et al. 2010. A novel bioassay for detecting GPCR heterodimerization: transactivation of β_2 adrenergic receptor by bradykinin receptor. *J. Biomol. Screen.* 15: 251-260.
5. 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.

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