**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 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: BDKB1 (human) mapping to 14q32.2; Bdkrb1 (mouse) mapping to 12 E.

**SOURCE**

bradykinin B1 R (M-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of bradykinin B1 R of mouse 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-15048 P, (100 µg peptide in 0.5 ml PBS containing <0.1% sodium azide and 0.2% BSA).

**APPLICATIONS**

bradykinin B1 R (M-19) is recommended for detection of bradykinin B1 receptor of mouse, rat and, to a lesser extent, 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 lystate)], 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 B1 R siRNA (h): sc-9878, bradykinin B1 R siRNA (m): sc-39879, bradykinin B1 R shRNA Plasmid (h): sc-39879-SH, bradykinin B1 R shRNA Plasmid (m): sc-39879-SH, bradykinin B1 R shRNA (h) Lentiviral Particles: sc-39878-V and bradykinin B1 R shRNA (m) Lentiviral Particles: sc-39879-V.

Molecular Weight of bradykinin B1 R: 35 kDa.

Positive Controls: KNRK whole cell lysate: sc-2214 or A-10 cell lysate: sc-3806.

**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**


**SELECT PRODUCT CITATIONS**


**PROTOCOLS**

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

**MONOS**

Try bradykinin B1 R (3A2): sc-293196, our highly recommended monoclonal alternative to bradykinin B1 R (M-19).