

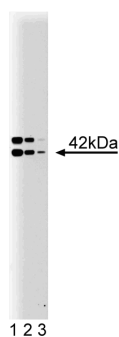
## Technical Data Sheet

**Purified Mouse Anti-B2 Bradykinin Receptor****Product Information**

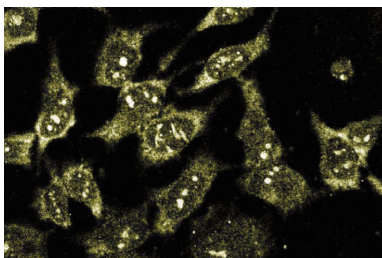
<b>Material Number:</b>	<b>610452</b>
<b>Size:</b>	150 µg
<b>Concentration:</b>	250 µg/ml
<b>Clone:</b>	20/B2 Bradykinin Receptor
<b>Immunogen:</b>	Human B2 Bradykinin Receptor aa. 350-364
<b>Isotype:</b>	Mouse IgG2b, κ
<b>Reactivity:</b>	QC Testing: Rat Tested in Development: Human
<b>Target MW:</b>	42 kDa
<b>Storage Buffer:</b>	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

**Description**

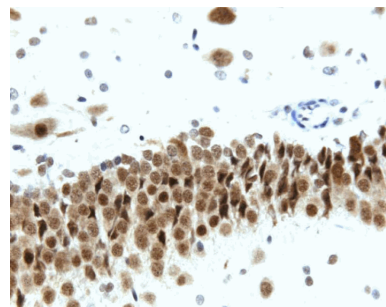
Bradykinin is a nine amino acid vasoactive peptide that elicits numerous physiologic responses such as vasodilation, smooth muscle spasm, and pain. Bradykinin is one of a family of such peptides called the kinins. The kinins are generated from high molecular weight precursors called kininogens from proteolysis induced by pathophysiologic conditions such as inflammation or allergy. The physiological actions of these kinins are mediated by their interaction with transmembrane receptors. There are two distinct bradykinin receptor subtypes: B1 and B2. Both are coupled to G-proteins. The B2 receptor subtype is found in healthy smooth muscle cells and neurons, whereas, the B1 receptors are only detected following tissue injury. The B2 receptor is similar in structure to other seven helix G-protein coupled receptors. Bradykinin has a relatively low affinity for B1 receptors, and interacts primarily with the B2 receptor. This interaction stimulates several second messenger systems, including inositol phospholipid hydrolysis, arachidonic acid metabolism, tyrosine phosphorylation, and membrane depolarization and hyperpolarization.



**Western blot analysis of B2 Bradykinin Receptor on a rat pituitary lysate.** Lane 1: 1:1000, lane 2: 1:2000, lane 3: 1:4000 dilution of the mouse anti-B2 Bradykinin Receptor antibody.



**Immunofluorescence staining of HeLa cells (Human cervical epitheloid carcinoma; ATCC CCL-2.2).**



**Immunohistochemistry: Rat hippocampus, formalin-fixed paraffin-embedded tissue, with citrate pre-treatment (20X magnification).**

**Preparation and Storage**

Store undiluted at -20°C.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

**Application Notes****Application**

Western blot	Routinely Tested
Immunofluorescence	Tested During Development
Immunohistochemistry	Tested During Development
Immunoprecipitation	Not Recommended

**Recommended Assay Procedure:**

**Western blot:** Please refer to [http://www.bdbiosciences.com/support/resources/cell\\_biology/index.jsp](http://www.bdbiosciences.com/support/resources/cell_biology/index.jsp)

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## Suggested Companion Products

Catalog Number	Name	Size	Clone
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)
554001	FITC Goat Anti-Mouse Ig	0.5 mg	Polyclonal

## Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to [www.bdbiosciences.com/pharming/protocols](http://www.bdbiosciences.com/pharming/protocols) for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
5. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at [www.bdbiosciences.com/colors](http://www.bdbiosciences.com/colors).

## References

Duchene J, Schanstra JP, Pecher C. A novel protein-protein interaction between a G protein-coupled receptor and the phosphatase SHP-2 is involved in bradykinin-induced inhibition of cell proliferation. *J Biol Chem.* 2002; 277(43):40375-40383. (Biology: Immunoprecipitation, Western blot)

Ewert S, Johansson B, Holm M, Helander HF, Fandriks L. The bradykinin BK2 receptor mediates angiotensin II receptor type 2 stimulated rat duodenal mucosal alkaline secretion. *BMC Physiol.* 2003; 3(1):1-9. (Biology: Immunohistochemistry, Western blot)

Golser R, Gorren AC, Leber A. Interaction of endothelial and neuronal nitric-oxide synthases with the bradykinin B2 receptor. Binding of an inhibitory peptide to the oxygenase domain blocks uncoupled NADPH oxidation. *J Biol Chem.* 2000; 275(8):5291-5296. (Biology: Immunoprecipitation, Western blot)

Powell SJ, Slynn G, Thomas C, Hopkins B, Briggs I, Graham A. Human bradykinin B2 receptor: nucleotide sequence analysis and assignment to chromosome 14. *Genomics.* 1993; 15(2):435-438. (Biology)

Xie P, Browning DD, Hay N, Mackman N, Ye RD. Activation of NF-kappa B by bradykinin through a Galpha(q)- and Gbeta gamma-dependent pathway that involves phosphoinositide 3-kinase and Akt. *J Biol Chem.* 2000; 275(32):24907-24914. (Biology: Western blot)

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