



# Bradykinin (K-15): sc-14941

## BACKGROUND

Bradykinin (also known as Kinin-9 or Kallidin) is an endogenous vasodepressor hormone. Bradykinin is one of the most important peptides in regulating vascular tone, water, and ionic balance in the body, and, as such, plays a key role in controlling blood pressure. Bradykinin acts on small cell lung cancers in a paracrine manner by inhibiting the growth of mammary stromal cells. Bradykinin reduces blood pressure by dilating blood vessels and inducing intracellular calcium mobilization. In bronchial smooth muscles, and also in the intestines and the uterus, bradykinin leads to muscle contraction. Bradykinin is also one of the most potent pain inducing substances known.

## REFERENCES

1. Woll, P., et al. 1989. Neuropeptides as growth regulators. *Br. Med. Bull.* 45: 492-505.
2. Bevis, C.L., et al. 1990. Peptides from frog skin. *Annu. Rev. Biochem.* 59: 395-414.
3. de Castiglione, R., et al. 1991. Non-mammalian peptides: structure determination synthesis, and biological activity. *Chimicaoggi.* 4: 9-15.
4. Rozengurt, E. 1991. Neuropeptides as cellular growth factors: Role of multiple signaling pathways. *Eur. J. Clin. Invest.* 21: 123-134.
5. Schüller, H.M. 1991. Receptor-mediated mitogenic signals and lung cancer. *Cancer Cells* 3: 496-503.
6. Gonzalez, C.B., et al. 1999. Vasopressin and bradykinin receptors in the kidney: implications for tubular function. *Biol. Res.* 32: 63-76.
7. Morinelli, T.A., et al. 2001. A metabolic fragment of bradykinin, Arg-Pro-Gly-Phe, protects against the deleterious effects of lipopolysaccharide in rats. *J. Pharmacol. Exp. Ther.* 296: 71-76.

## SOURCE

Bradykinin (K-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Bradykinin 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-14941 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

## APPLICATIONS

Bradykinin (K-15) is recommended for detection of bradykinin and the kininogen precursor of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.