

AR05019PU-N**Synthetic Human Bradykinin****Alternate names:**

Bradykinin, Kallidin-1, Kallidin-I, Kallidin1

Quantity:

1 mg

Concentration:

1.0 mg/ml

Background:

Bradykinin is a nine amino acid vasoactive peptide which elicits numerous physiologic responses such as vasodilation, smooth muscle spasm and pain. Bradykinin is one of a family of such peptides called the kinins. These kinins are generated by proteolysis of high molecular weight precursors called kininogens upon activation by pathophysiologic conditions such as inflammation or allergy. The physiological actions of these kinins are brought about through their interaction with transmembrane receptors. There are two distinct bradykinin receptor subtypes; B1 and B2, both of which appear to be 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 relatively low affinity for B1 receptors, interacting primarily with the B2 receptor through which several second messenger systems are stimulated, including inositol phospholipid hydrolysis, arachidonic acid metabolism, tyrosine phosphorylation, and membrane depolarization and hyperpolarization.

Uniprot ID:[P01042](#)**NCBI:**[NP_000884.1](#)**GeneID:**[3827](#)**Species:**

Human

Source:

Human

Format:**State:** Liquid purified synthetic peptide.**Purity:** >99% pure prepared by Solid Phase synthesis.**Buffer System:** Acetate salt containing 0.09% Sodium Azide as preservative.**Applications:**

ELISA.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Description:

This product is synthetic Human Bradykinin, a 9 amino acid peptide that acts as a vasodilator in inflammatory responses. Bradykinin is produced through cleavage of High-Molecular-Weight Kininogen (HMWK) by the protease Kallikrein and can be degraded by aminopeptidase P (APP), carboxypeptidase N (CPN) and Angiotensin-converting enzyme (ACE).

AA Sequence:

RPPGFSPFR

Molecular weight: 1060 Da

Storage:

Store the protein undiluted at -20°C.
Avoid repeated freezing and thawing.
Shelf life: one year from despatch.