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DATASHEET

Bradykinin

Product overview

| | |
|--------------------------|--|
| Name | Bradykinin |
| Cat No | HB3101 |
| Alternative names | BK |
| Purity | >95% |
| Description | Endogenous bradykinin receptor agonist |

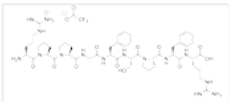
Biological Data

| | |
|-------------------------------|--|
| Biological description | <p>Bradykinin is an endogenous bradykinin receptor agonist with selectivity for B₂ over B₁ receptors.</p> <p>Bradykinin interacts with its GPCRs (G-protein-coupled receptors) to induce changes in intracellular calcium via a variety of mechanisms (PLC, prostaglandins, protein kinases and PLA₂). Addition of bradykinin to NG 108-15 neural cells causes a transient hyperpolarization followed by prolonged cell depolarization.</p> <p>Recently Bradykinin has also been shown to neuron-generating division of neural progenitor cells through ERK activation</p> <p>The peptide is involved in a variety of physiological and pathophysiological activities. It is a pro-inflammatory mediator and a potent vasodilator which exerts its vasodilatory actions by inducing endothelial release of NO (nitric oxide), prostacyclin and EDHF.</p> <p>It is involved in cardiovascular homeostasis, inflammation and nociception. It also shows anti-proliferative and anti - fibrogenic effects.</p> |
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Solubility & Handling

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|-----------------------------|---|
| Storage instructions | -20 °C |
| Solubility overview | Soluble in water (1 mg/ml) |
| Important | This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use. |

Chemical Data

| | |
|---------------------------|---|
| Chemical name | RPPGFSPFR |
| Molecular Weight | 1060.22 |
| Chemical structure |  |
| Molecular Formula | C ₅₀ H ₇₃ N ₁₅ O ₁₁ |
| CAS Number | 58-82-2 |
| PubChem identifier | 439201 |
| SMILES | <chem>C1C[C@H](N(C1)C(=O)[C@@H]2CCCC2C(=O)[C@H](CCCN=C(N)N)N)C(=O)NCC(=O)N[C@@H](CC3=CC=CC=C3)C(=O)N[C@@H](CO)C(=O)N4CCC[C@H]4C(=O)N[C@@H](CC5=CC=CC=C5)C(=O)N[C@@H](CCCN=C(N)N)C(=O)O</chem> |

InChiKey
Appearance

QXZGBUJJYSLZLT-FDISYFBBSA-N
Lyophilized powder

References

Bradykinin receptors and their antagonists.

Regoli et al (1998) Eur J Pharmacol. 348(1)

PubMedID [9650825](#)

Endothelial function and bradykinin in humans.

Horning et al (1997) Drugs 2

PubMedID [9429844](#)

Bradykinin promotes neuron-generating division of neural progenitor cells through ERK activation.

Pillat et al (2016) J Cell Sci. 129(18)

PubMedID [27528403](#)

The kinin system--bradykinin: biological effects and clinical implications. Multiple role of the kinin system--bradykinin.

Golias et al (2007) Hippokratia 11(3)

PubMedID [19582206](#)
