

OPRK1 Blocking Peptide (Center)

Synthetic peptide Catalog # BP20237C

Specification

OPRK1 Blocking Peptide (Center) - Product Information

Primary Accession P41145

Other Accession <u>P34975</u>, <u>P33534</u>, <u>NP 000903.2</u>

OPRK1 Blocking Peptide (Center) - Additional Information

Gene ID 4986

Other Names

Kappa-type opioid receptor, K-OR-1, KOR-1, OPRK1, OPRK

Target/Specificity

The synthetic peptide sequence is selected from aa 196-209 of HUMAN OPRK1

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

OPRK1 Blocking Peptide (Center) - Protein Information

Name OPRK1

Synonyms OPRK

Function

G-protein coupled opioid receptor that functions as a receptor for endogenous alpha-neoendorphins and dynorphins, but has low affinity for beta-endorphins. Also functions as a receptor for various synthetic opioids and for the psychoactive diterpene salvinorin A. Ligand binding causes a conformation change that triggers signaling via guanine nucleotide-binding proteins (G proteins) and modulates the activity of down-stream effectors, such as adenylate cyclase. Signaling leads to the inhibition of adenylate cyclase activity. Inhibits neurotransmitter release by reducing calcium ion currents and increasing potassium ion conductance. Plays a role in the perception of pain. Plays a role in mediating reduced physical activity upon treatment with synthetic opioids. Plays a role in the regulation of salivation in response to synthetic opioids. May play a role in arousal and regulation of autonomic and neuroendocrine functions.

Cellular Location



Cell membrane; Multi-pass membrane protein

Tissue LocationDetected in brain and placenta.

OPRK1 Blocking Peptide (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

• Blocking Peptides

OPRK1 Blocking Peptide (Center) - Images

OPRK1 Blocking Peptide (Center) - Background

Inhibits neurotransmitter release by reducing calcium ion currents and increasing potassium ion conductance. Receptor for dynorphins. May play a role in arousal and regulation of autonomic and neuroendocrine functions.

OPRK1 Blocking Peptide (Center) - References

Pinheiro, A.P., et al. Am. J. Med. Genet. B Neuropsychiatr. Genet. 153B (5), 1070-1080 (2010): Bruijnzeel, A.W. Brain Res Rev 62(1):127-146(2009)
Gratacos, M., et al. Am. J. Med. Genet. B Neuropsychiatr. Genet. 150B (6), 808-816 (2009): de Krom, M., et al. Biol. Psychiatry 65(7):625-630(2009)
Tabakoff, B., et al. BMC Biol. 7, 70 (2009):