

**OPRK1 Blocking Peptide (Center)**  
**Synthetic peptide**  
**Catalog # BP20237C****Specification**

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**OPRK1 Blocking Peptide (Center) - Product Information**

Primary Accession [P41145](#)  
Other Accession [P34975](#), [P33534](#), [NP\\_000903.2](#)

**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 Location**

Detected 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)  
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de Krom, M., et al. Biol. Psychiatry 65(7):625-630(2009)  
Tabakoff, B., et al. BMC Biol. 7, 70 (2009) :