

OPRK1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP20237C

Specification

OPRK1 Antibody (Center) - Product Information

Application WB,E
Primary Accession P41145

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

Reactivity
Predicted
Mouse, Rat
Host
Clonality
Polyclonal
Isotype
Calculated MW
Antigen Region
Human
Mouse, Rat
Polyclonal
Rabbit IgG
A2645
Antigen Region
181-209

OPRK1 Antibody (Center) - Additional Information

Gene ID 4986

Other Names

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

Target/Specificity

This OPRK1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 181-209 amino acids from the Central region of human OPRK1.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

OPRK1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

OPRK1 Antibody (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

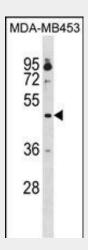
Detected in brain and placenta.

OPRK1 Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

OPRK1 Antibody (Center) - Images



OPRK1 Antibody (Center) (Cat. #AP20237c) western blot analysis in MDA-MB453 cell line lysates (35ug/lane). This demonstrates the OPRK1 antibody detected the OPRK1 protein (arrow).

OPRK1 Antibody (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 Antibody (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):