

# **OPRK1 / Kappa Opioid Receptor Antibody (C-Terminus)**

Rabbit Polyclonal Antibody Catalog # ALS10072

# **Specification**

# OPRK1 / Kappa Opioid Receptor Antibody (C-Terminus) - Product Information

Application IHC
Primary Accession P41145
Reactivity Human
Host Rabbit
Clonality Polyclonal
Calculated MW 43kDa KDa

# OPRK1 / Kappa Opioid Receptor Antibody (C-Terminus) - Additional Information

**Gene ID 4986** 

#### **Other Names**

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

# Target/Specificity

Human Kappa Opioid Receptor. BLAST analysis of the peptide immunogen showed no homology with other human proteins.

#### **Reconstitution & Storage**

Long term: -70°C; Short term: +4°C

### **Precautions**

OPRK1 / Kappa Opioid Receptor Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

# OPRK1 / Kappa Opioid Receptor Antibody (C-Terminus) - 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.

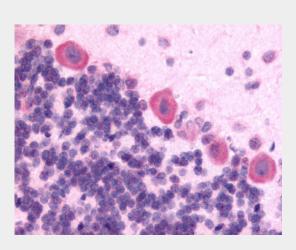
Volume 50 µl

# OPRK1 / Kappa Opioid Receptor Antibody (C-Terminus) - 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 / Kappa Opioid Receptor Antibody (C-Terminus) - Images



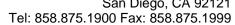
Anti-Kappa Opioid Receptor antibody ALS10072 IHC of rat brain, Purkinje neurons.

### OPRK1 / Kappa Opioid Receptor Antibody (C-Terminus) - Background

G-protein coupled opioid receptor that functions as receptor for endogenous alpha-neoendorphins and dynorphins, but has low affinity for beta-endorphins. Also functions as 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.

# OPRK1 / Kappa Opioid Receptor Antibody (C-Terminus) - References







Mansson E., et al. Biochem. Biophys. Res. Commun. 202:1431-1437(1994). Simonin F., et al. Proc. Natl. Acad. Sci. U.S.A. 92:7006-7010(1995).

Zhu J., et al. Life Sci. 56:PL201-PL207(1995).

Puhl H.L. III, et al. Submitted (APR-2002) to the EMBL/GenBank/DDBJ databases.

Ota T., et al. Nat. Genet. 36:40-45(2004).