

# Product Information

## **MemDX™ Membrane Protein Human OPRK1 (Opioid receptor kappa 1) Expressed *in vitro* *E.coli* expression system, Full Length**

Cat. No.: **MPX3503K**

This product is for research use only and is not intended for diagnostic use.

This product is a Human OPRK1 membrane protein expressed *in vitro* *E.coli* expression system. The protein is for research use only and is not approved for use in humans or in clinical diagnosis.

### Product Specifications

#### Host Species

Human

#### Target Protein

OPRK1

#### Protein Length

Full Length

#### Protein Class

GPCR

#### TMD

7

#### Sequence

MDSPIQIFRGEPGPTCAPSACLPPNSSAWFPGWAEPDSNGSAGSEDAQLEPAHISPAIPVIITAVYSVVFVVGVLVGNLSLVMFVIIRYTI

### Product Description

#### Expression Systems

*in vitro* *E.coli* expression system

#### Tag

10xHis tag at the N-terminus

#### Protein Format

Soluble

#### Form

Liquid or Lyophilized powder

#### Buffer

Tris/PBS-based buffer, 6% Trehalose, pH 8.0

### **Storage**

Aliquot and store at -20°C or lower. For long term storage, we recommend to store at -70°C or lower. Avoid freeze/thaw cycles.

### **Target**

#### **Target Protein**

OPRK1

#### **Full Name**

Opioid receptor kappa 1

#### **Introduction**

This gene encodes an opioid receptor, which is a member of the 7 transmembrane-spanning G protein-coupled receptor family. It functions as a receptor for endogenous ligands, as well as a receptor for various synthetic opioids. Ligand binding results in inhibition of adenylate cyclase activity and neurotransmitter release. This opioid receptor plays a role in the perception of pain and mediating the hypolocomotor, analgesic and aversive actions of synthetic opioids. Variations in this gene have also been associated with alcohol dependence and opiate addiction. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. A recent study provided evidence for translational readthrough in this gene, and expression of an additional C-terminally extended isoform via the use of an alternative in-frame translation termination codon.

#### **Alternative Names**

OPRK1; KOP; KOR; KOR1; OPRK; KOR-1; K-OR-1; kappa-type opioid receptor; Opiate receptor, kappa-1; kappa opioid receptor; Opioid receptor kappa 1

#### **Gene ID**

[4986](#)

#### **UniProt ID**

[P41145](#)