Datasheet for ABIN7043401

anti-OPRD1 antibody (Extracellular)

2 Images

Go to Product page

Overview

Quantity:	50 µL
Target:	OPRD1
Binding Specificity:	AA 2-18, Extracellular
Reactivity:	Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This OPRD1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (IF), Immunochromatography (IC), Live Cell Imaging (LCI)

Product Details

Purpose:	A Rabbit Polyclonal Antibody to ?-Opioid Receptor (OPRD1)
Immunogen:	Immunogen: Synthetic peptide Immunogen Sequence: (C)ELVPSARAELQSSPLVN corresponding to amino acid residues 2-18 of mouse delta-Opioid receptor
Isotype:	IgG
Specificity:	Extracellular, N-terminus
Cross-Reactivity:	Mouse, Rat
Cross-Reactivity (Details):	Will not recognize human samples.
Predicted Reactivity:	Rat - 13,17 amino acid residues identical

Product Details

Characteristics:	Anti-δ-Opioid Receptor (OPRD1) (extracellular) Antibody (ABIN7043401, ABIN7044891 and ABIN7044892)) is a highly specific antibody directed against an epitope of the mouse protein. The antibody can be used in western blot, immunocytochemistry, and immunohistochemistry applications. The antibody recognizes an extracellular epitope and can potentially detect the receptor in living cells. The antibody is designed to recognize DOR-1 from mouse and rat samples. It will not recognize DOR-1 from human samples.
Purification:	Affinity purified on immobilized antigen.

Target Details

Target:	OPRD1
Alternative Name:	OPRD1 (OPRD1 Products)
Background:	DOR-1,Endogenous opiates such as endorphins, endomorphins, and enkephalins, as well as opiate drugs (including morphine) exert their effects by binding to opioid receptors. Three "classic" types of opioid receptors have been identified: mu (μ)-opioid (MOP) receptor, delta (δ)-opioid (DOP) receptor, and kappa (κ)-opioid (KOP) receptor.1 Recently, the nociceptin/orphanin FQ (N/OFQ) peptide (NOP) receptor was also described. Despite its significant sequence homology, its pharmacological profile differs greatly from those of the classic μ, δ, and κ receptors.2The opioid receptors belong to the G protein-coupled receptor (GPCR) superfamily whose members share a common structure of seven putative transmembrane domains, an extracellular amino terminus, a cytoplasmic carboxyl terminus, and a third intracellular loop important for binding G proteins.1All three classic opioid receptors mediate opioid-induced analgesia. Supraspinal analgesia is mainly mediated by the μ-opioid receptor, whereas μ-, δ-, and κ-receptors participate in the control of pain at the spinal level.3 The opioid receptors also mediate the mood-altering properties of opioids.4 Cross-talk between μ- and δ- opioid receptors was demonstrated when subeffective doses of d-opioid receptors agonists modulated m-mediated analgesia.5The δ receptors are discretely distributed in the central nervous system (CNS), with a prominent gradient of receptor density from high levels in forebrain structures to relatively low levels in most hindbrain regions.2 Alternative names: delta-Opioid Receptor (OPRD1), DOR-1
Gene ID:	18386
NCBI Accession:	NM_000911
UniProt:	P32300

Target Details

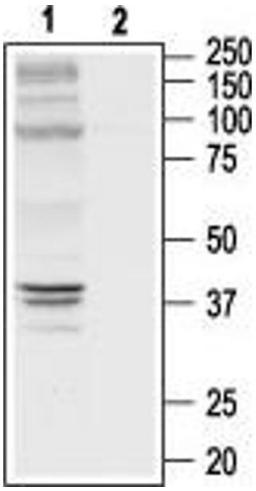
Pathways:	Protein targeting to Nucleus

Application Details

Application Notes:	Antigen preadsorption control: 1 µg peptide per 1 µg antibody Application Dilutions Immunohistochemistry paraffin embedded sections ihc: 1:100 Application Dilutions Western blot wb: 1:200
Comment:	Negative Control: BLP-OR014 Blocking Peptide: BLP-OR014
Restrictions:	For Research Use only

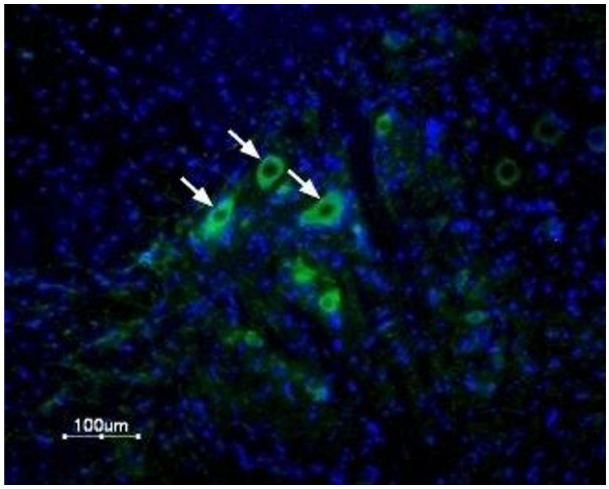
Handling

Format:	Lyophilized
Reconstitution:	Recosntitute with double distilled water (DDW) to a concentration of 1.0 mg/mL.
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4
Storage:	4 °C,-20 °C
Storage Comment:	Storage before reconstitution: The antibody ships as a lyophilized powder at room temperature. Upon arrival, it should be stored at -20°C. Storage after reconstitution: The reconstituted solution can be stored at 4°C for up to 1 week. For longer periods, small aliquots should be stored at -20°C. Avoid multiple freezing and thawing. Centrifuge all antibody preparations before use (10000 x g 5 min).



Western Blotting

Image 1. Western blot analysis of a rat cortex lysate: - 1. Anti-δ-Opioid Receptor (OPRD1) (extracellular) Antibody (ABIN7043401, ABIN7044891 and ABIN7044892), (1:200).2. Anti-δ-Opioid Receptor (OPRD1) (extracellular) Antibody, preincubated with δ-Opioid Receptor/OPRD1 (extracellular) Blocking Peptide (#BLP-OR014).



Immunohistochemistry

Image 2. Expression of δ opioid receptor (DOR-1) in rat spinal cord - Immunohistochemical staining of rat spinal cord frozen section using Anti-δ-Opioid Receptor (OPRD1) (extracellular) Antibody (ABIN7043401, ABIN7044891 and ABIN7044892), (1:100), followed by goat-anti-rabbit AlexaFluor-488 secondary antibody (green). Staining is present in neuronal cell bodies (white arrows). Hoechst 33342 is used as the counterstain (blue).