

Product datasheet for **TA328921**

Oprd1 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	WB: 1:200-1:2000; IHC: 1:100-1:3000
Reactivity:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide (C)ELVPSARAELQSSPLVN corresponding to amino acid residues 2-18 of mouse d-Opioid receptor . Extracellular, N-terminus.
Formulation:	Lyophilized. Concentration before lyophilization ~0.8mg/ml (lot dependent, please refer to CoA along with shipment for actual concentration). Buffer before lyophilization: Phosphate buffered saline (PBS), pH 7.4, 1% BSA, 0.05% NaN3.
Reconstitution Method:	Add 50 ul double distilled water (DDW) to the lyophilized powder.
Purification:	Affinity purified on immobilized antigen.
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	opioid receptor, delta 1
Database Link:	NP_038650 Entrez Gene 24613 Rat P32300



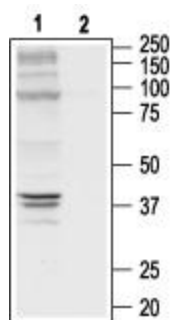
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Background:

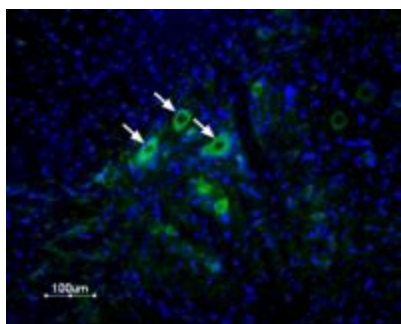
Endogenous opiates such as endorphins, endomorphins, and enkephalins, as well as opiate drugs (including morphine) exert their effects by binding to opioid receptors. Three "classic" types of opioid receptors have been identified: μ -opioid (MOP) receptor, δ -opioid (DOP) receptor, and κ -opioid (KOP) receptor. 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. The 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. All three classic opioid receptors mediate opioid-induced analgesia. Supraspinal analgesia is mainly mediated by the μ -opioid receptor, whereas δ -, κ -, and κ -receptors participate in the control of pain at the spinal level. The opioid receptors also mediate the mood-altering properties of opioids. Cross-talk between μ - and δ -opioid receptors was demonstrated when subeffective doses of δ -opioid receptors agonists modulated μ -mediated analgesia. The 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.

Synonyms:

DOR-1; OPRD

Product images:


Western blot analysis of a rat cortex lysate: 1. Anti- δ -Opioid Receptor (extracellular) antibody, (1:200). 2. Anti- δ -Opioid Receptor (extracellular) antibody, preincubated with the control peptide antigen.



Expression of δ opioid receptor (DOR-1) in rat spinal cord. Immunohistochemical staining of rat spinal cord frozen section using Anti- δ -Opioid Receptor (extracellular) antibody, (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).