

DESCRIPTION

Species Reactivity	Rat
Specificity	Detects rat μ Opioid R/OPRM1 in direct ELISAs.
Source	Monoclonal Rabbit IgG Clone # 1126B
Purification	Protein A or G purified from cell culture supernatant
Immunogen	Synthetic peptide with a short amino acid sequence from the N-terminus of rat μ Opioid R/OPRM1 Accession # P33535
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Immunohistochemistry Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

The μ -type opioid receptor (MOR), also known as OPRM1, is a 60-70 kDa variably glycosylated G protein-coupled receptor that mediates the biological effects of many alkaloid and peptide opioids including morphine. MOR is primarily expressed on neurons in the brain, spinal cord, and gastrointestinal tract as well as on immune cells. MOR activation induces analgesia, euphoria, sedation, respiratory depression, and reduced intestinal motility. Following agonist binding, MOR is phosphorylated and internalized which contributes to opioid tolerance and desensitization. OPRM1 can form heterodimers with several other 7TM GPCRs including the delta-type Opioid Receptor (DOR), Nociceptin/Orphanin Receptor (ORL1), Neurokinin 1 Receptor (NK1), Somatostatin Receptor 2 (SSTR2), Cannabinoid Receptor 1, CCR5, and the α 2A-Adrenergic Receptor (ADRA2A). Rat MOR shares 94% and 98% aa sequence identity with human and mouse MOR, respectively.

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