

Rabbit anti-Human OPRM1 Polyclonal Antibody | anti-OPRM1 antibody

OPRM1 Antibody

CATALOG # AAA234094	HOST Rabbit	REACTIVITY Human	APPLICATIONS Immunohistochemistry, Western Blot, ELISA
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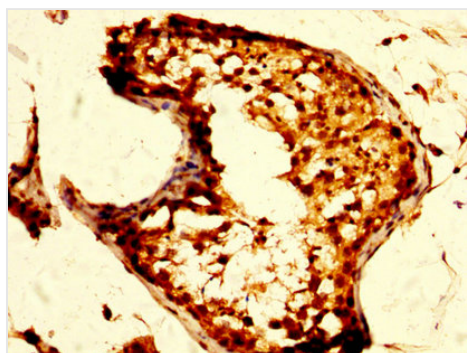
PRODUCT SYNONYMS

OPRM1; Polyclonal Antibody; OPRM1 Antibody; Mu-type opioid receptor; M-OR-1; MOR-1; Mu opiate receptor; Mu opioid receptor; MOP; hMOP; MOR1; anti-OPRM1 antibody

PRODUCT SPECIFICATIONS

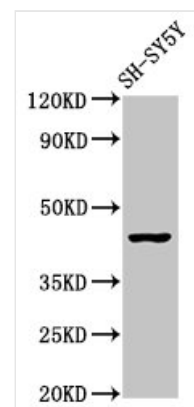
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	IgG
Purity/Purification	>95%, Protein G purified
Form/Format	Liquid
Sequence Length	400
Applicable Applications for anti-OPRM1 antibody	IHC (Immunohistochemistry), WB (Western Blot), ELISA
Immunogen	Recombinant Human Mu-type opioid receptor protein (1-68AA)
Conjugation	Non-conjugated
Buffer	Preservative: 0.03% Proclin 300 Constituents: 50% Glycerol, 0.01M PBS, pH 7.4
Preparation and Storage	Upon receipt, store at -20 degree C or -80 degree C. Avoid repeated freeze.

IMAGES



IHC (Immunohistochemistry)

IHC image of AAA234094 diluted at 1:500 and staining in paraffin-embedded human testis tissue performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4 degree C overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.



WB (Western Blot)

Western BlotPositive WB detected in: SH-SY5Y whole cell lysateAll lanes: OPRM1 antibody at 2.9ug/mlSecondaryGoat polyclonal to rabbit IgG at 1/50000 dilutionPredicted band size: 45, 44, 50, 48, 46, 56, 35, 37, 34, 14, 11, 21 KDaObserved band size: 45 KDa

ADDITIONAL INFORMATION

Related Product Information for anti-OPRM1 antibody	Receptor for endogenous opioids such as beta-endorphin and endomorphin. Receptor for natural and synthetic opioids including morphine, heroin, DAMGO, fentanyl, etorphine, buprenorphin and methadone (PubMed:7905839, PubMed:7957926, PubMed:7891175, PubMed:12589820, PubMed:9689128). Agonist binding to the receptor induces coupling to an inactive GDP-bound heterotrimeric G-protein complex and subsequent exchange of GDP for GTP in the G-protein alpha subunit leading to dissociation of the G-protein complex with the free GTP-bound G-protein alpha and the G-protein beta-gamma dimer activating downstream cellular effectors (PubMed:7905839). The agonist- and cell type-specific activity is predominantly coupled to pertussis toxin-sensitive G(i) and G(o) G alpha proteins, GNAI1, GNAI2, GNAI3 and GNAO1 isoforms Alpha-1 and Alpha-2, and to a lesser extent to pertussis toxin-insensitive G alpha proteins GNAZ and GNA15 (PubMed:12068084). They mediate an array of downstream cellular responses, including inhibition of adenylate cyclase activity and both N-type and L-type calcium channels, activation of inward rectifying potassium channels, mitogen-activated protein kinase (MAPK), phospholipase C (PLC), phosphoinositide/protein kinase (PKC), phosphoinositide 3-kinase (PI3K) and regulation of NF-kappa-B. Also couples to adenylate cyclase stimulatory G alpha proteins. The selective temporal coupling to G-proteins and subsequent signaling can be regulated by RGSZ proteins, such as RGS9, RGS17 and RGS4. Phosphorylation by members of the GPRK subfamily of Ser/Thr protein kinases and association with beta-arrestins is involved in short-term receptor desensitization. Beta-arrestins associate with the GPRK-phosphorylated receptor and uncouple it from the G-protein thus terminating signal transduction. The phosphorylated receptor is internalized through endocytosis via clathrin-coated pits which involves beta-arrestins. The activation of the ERK pathway occurs either in a G-protein-dependent or a beta-arrestin-dependent manner and is regulated by agonist-specific receptor phosphorylation. Acts as a class A G-protein coupled receptor (GPCR) which dissociates from beta-arrestin at or near the plasma membrane and undergoes rapid recycling. Receptor down-regulation pathways are varying with the agonist and occur dependent or independent of G-protein coupling. Endogenous ligands induce rapid desensitization, endocytosis and recycling whereas morphine induces only low desensitization and endocytosis. Heterooligomerization with other GPCRs can modulate agonist binding, signaling and trafficking properties. Involved in neurogenesis. Isoform 12 couples to GNAS and is proposed to be involved in excitatory effects (PubMed:20525224). Isoform 16 and isoform 17 do not bind agonists but may act through oligomerization with binding-competent OPRM1 isoforms and reduce their ligand binding activity (PubMed:16580639).
Product Categories/Family for anti-OPRM1 antibody	Neuroscience; Cell biology

NCBI AND UNIPROT INFORMATION

NCBI GI #	117940060
NCBI GeneID	4988
NCBI Accession #	NP_000905.3
NCBI GenBank Nucleotide #	NM_000914.4
UniProt Accession #	P35372; Q12930; Q4VWM1; Q4VWM2; B0FXJ1; B2R9S7; B8Q1L7; B8Q1L8; B8Q1L9; E7EWZ3; G8XRH6; G8XRH8
Molecular Weight	20,188 Da
NCBI Official Full Name	mu-type opioid receptor isoform MOR-1
NCBI Official Synonym Full Names	opioid receptor mu 1
NCBI Official Symbol	OPRM1
NCBI Official Synonym Symbols	MOP; MOR; LMOR; MOR1; OPRM; M-OR-1
NCBI Protein Information	mu-type opioid receptor
UniProt Protein Name	Mu-type opioid receptor
UniProt Gene Name	OPRM1
UniProt Synonym Gene Names	MOR1; M-OR-1; MOR-1; MOP; hMOP

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/oprm1-antibody-immunohistochemistry-western-blot-elisa/234094>