

## Rabbit MOR-1 Polyclonal Antibody | anti-MOR-1 antibody

MOR-1 (phospho Ser375) Polyclonal Antibody

| CATALOG # | HOST   | REACTIVITY        | APPLICATIONS                       |
|-----------|--------|-------------------|------------------------------------|
| AAA28956  | Rabbit | Human, Mouse, Rat | Western Blot, Immunohistochemistry |

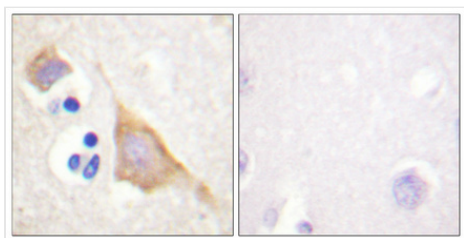
### PRODUCT SYNONYMS

MOR-1; Polyclonal Antibody; MOR-1 (phospho Ser375) Polyclonal Antibody; OPRM1; MOR1; Mu-type opioid receptor; M-OR-1; Mu opiate receptor; Mu opioid receptor; MOP; hMOP; anti-MOR-1 antibody

### PRODUCT SPECIFICATIONS

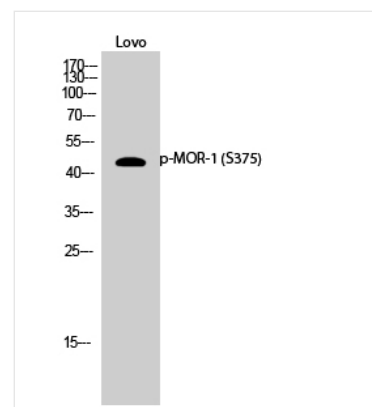
|                                                 |                                                                                                                                                       |
|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                            | Rabbit                                                                                                                                                |
| Reactivity                                      | Human, Mouse, Rat                                                                                                                                     |
| Clonality                                       | Polyclonal                                                                                                                                            |
| Applicable Applications for anti-MOR-1 antibody | WB (Western Blot), IHC (Immunohistochemistry)                                                                                                         |
| Preparation and Storage                         | Maintain refrigerated at 2-8 degree C for up to 2 weeks. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles. |

### IMAGES



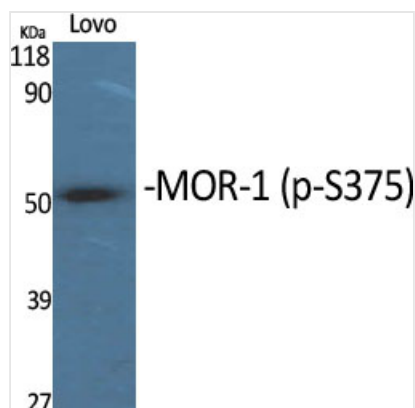
#### IHC (Immunohistochemistry)

Dilution: Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/20000. Not yet tested in other applications.



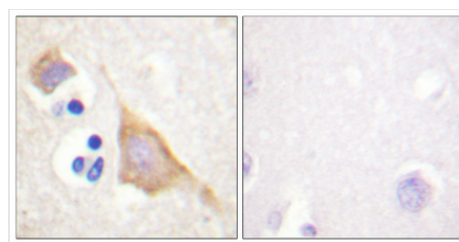
#### Application Data

Dilution: Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/20000. Not yet tested in other applications.



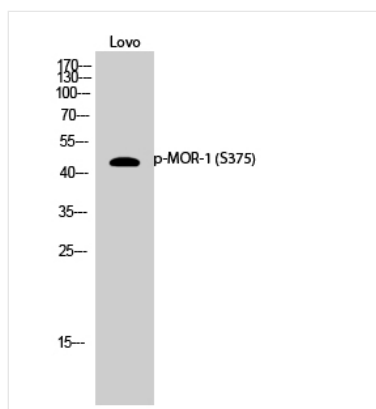
#### WB (Western Blot)

Dilution: Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/20000. Not yet tested in other applications.



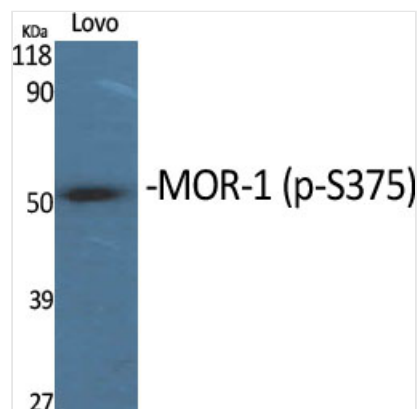
#### IHC (Immunohistochemistry-Paraffin)

Dilution: Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/20000. Not yet tested in other applications.



#### WB (Western Blot)

Dilution: Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/20000. Not yet tested in other applications.



#### WB (Western Blot)

Dilution: Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/20000. Not yet tested in other applications.

ADDITIONAL INFORMATION

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|-----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for anti-MOR-1 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: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). |
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NCBI AND UNIPROT INFORMATION

|                                  |                                                                                                |
|----------------------------------|------------------------------------------------------------------------------------------------|
| NCBI GI #                        | 117940060                                                                                      |
| NCBI GeneID                      | 4988                                                                                           |
| NCBI Accession #                 | NP_000905.3                                                                                    |
| NCBI GenBank Nucleotide #        | NM_000914.3                                                                                    |
| UniProt Accession #              | P35372; Q12930; Q4VWM1; Q4VWM2; Q4VWM3; B0FXJ1; B2R9S7; B8Q1L7; B8Q1L8; B8Q1L9; G8XRH6; G8XRH8 |
| Molecular Weight                 | 44,779 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; mu opiate receptor; mu opioid receptor hMOR-1a                        |
| UniProt Protein Name             | Mu-type opioid receptor                                                                        |
| UniProt Gene Name                | OPRM1                                                                                          |
| UniProt Synonym Gene Names       | MOR1; M-OR-1; MOR-1; MOP; hMOP                                                                 |
| UniProt Entry Name               | OPRM_HUMAN                                                                                     |

**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.

