



Mu Opioid Receptor

Data Sheet

Catalog Number:	RA10104	Host:	Rabbit
Product Type:	Whole Serum	Species Reactivity:	Human, Rat and Mouse
Immunogen Sequence:	NHQLLENLEAETAPLP	Format:	Whole Serum (with 0.05% sodium azide) Sent in liquid form

Applications: Immunohistochemistry 1:100-1:2,000
Immunocytochemistry 1:100-1:2,000
Western blotting 1:500-1:1,000

Dilutions listed only as a recommendation. Optimal dilution should be determined by investigator.

Storage: Store frozen. Aliquot as undiluted serum and immediately place at -20°C. Serum may have become trapped in top of vial during shipping. Centrifugation of vial is recommended before opening. Stable for at least 6 months at -20°C. Repeated freeze/thaw cycles compromise the integrity of the antiserum.

References: Ryan J. Horvathab, Alfonso Romero-Sandoval, Joyce A. De Leo. Inhibition of microglial P2X4 receptors attenuates morphine tolerance, Iba1, GFAP and μ opioid receptor protein expression while enhancing perivascular microglial ED2. PAIN®. Pages 401-413 (September 2010).

Hai-Bo Wanga, Bo Zhaoa, Yan-Qing Zhonga, Kai-Cheng Li, Zi-Yan Li, Qiong Wang, Yin-Jing Lua, Zhen-Ning Zhang, Shao-Qiu He, Han-Cheng Zheng, Sheng-Xi Wu, Tomas G. M. Hökfelt, Lan Baob, and Xu Zhanga. Coexpression of δ - and μ -opioid receptors in nociceptive sensory neurons. PNAS July 20, 2010 vol. 107 no. 29 13117-13122.

Marta Pinto, Marta Sousa, Deolinda Lima, Isaura Tavares. Participation of mu-opioid, GABAB, and NK1 receptors of major pain control medullary areas in pathways targeting the rat spinal cord: Implications for descending modulation of nociceptive transmission. Volume 510 Issue 2 Pages 175 - 187 Published Online: 9 Jul 2008. Copyright © 2008 Wiley-Liss, Inc., A Wiley Company.

Application Notes

Note: The current lot (401268) of this antibody shows less intense staining in spinal cord tissue vs. previous lots.

Immunohistochemistry:

Antiserum was used on perfusion fixed tissue. Perfusion: 1) calcium-free Tyrode's solution, 2) paraformaldehyde-picric acid fixative, and 3) 10% sucrose in PBS as a cryo-protectant. Desired tissues were dissected and stored overnight in 10% sucrose in PBS.

Slide-mounted tissue sections were processed for indirect immunofluorescence. Slides were incubated with blocking buffer for 1 hour at room temperature. Primary antiserum was diluted with blocking buffer to the appropriate working concentration. Blocking buffer was removed and slides were incubated for 18-24 hours at 4°C with primary antiserum. Slides were rinsed 3 times and then incubated with secondary antibodies for 1 hour at room temperature. Slides were again rinsed 3 times and coverslipped. Staining was examined using fluorescence microscopy.

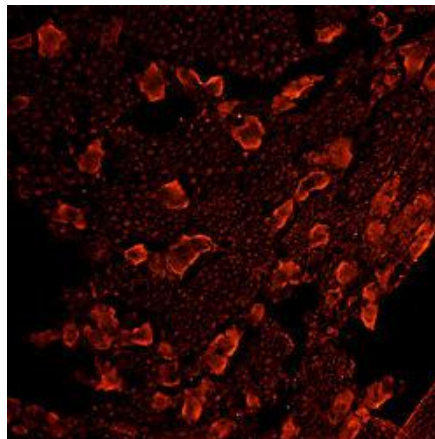
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Image: MOR staining of Rat DRG (dilution: 1:100) incubation at 4 °C overnight. Secondary antibody is anti-Rabbit Rhodamine Red (dilution:1:200) incubation at room temperature for 1 hour.



Immunocytochemistry:

Mu Opioid Receptor transfected cells were processed for indirect immunofluorescence. Media was removed and cells were gently washed 3 times with serum-free media. Following fixation procedure, cells were processed for indirect immunofluorescence as described above.

Western Blotting:

Cell membrane extracts were examined by electrophoresis (8% acrylamide) with SDS under reducing conditions and transferred to a nylon membrane. Membranes were blocked for 1 hour at 4°C with 0.1% Tween 20 and 2.5% milk powder (w/v) in PBS. Membranes were incubated with primary antiserum (1:500 in the same buffer overnight at 4°C. Membranes were rinsed and incubated with horseradish peroxidase conjugated secondary antibody for 1 hour at room temperature. Following rinsing, the membranes were processed using enhanced chemiluminescence.

Note: Sodium azide (NaN₃) interferes with peroxidase reactions and should not be used with peroxidase methodologies. If sodium azide is present in any steps of the staining procedure, the tissue should thoroughly be rinsed with sodium azide-free buffer before performing the peroxidase reaction.

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Opioid Receptor Antibodies

Name	Catalog #	Type	Species	Applications	Size	Price
Delta Opioid Receptor 3-17	RA19072	Rabbit IgG	H; R	WB	100 ul 100 ug Blocking Peptide	\$350 \$95
Delta Opioid Receptor 358-372	RA10101	Rabbit IgG	M; R	ICC	50 ul 150 ul 20 ug Blocking Peptide	\$145 \$348 \$95
Delta Opioid Receptor 361-372	RA19073	Rabbit IgG	H; M; R	IF; IHC; WB	100 ul 100 ug Blocking Peptide	\$350 \$125
proDynorphin (guinea pig)	GP10109	Guinea Pig IgG	GP	IHC	50 ul 150 ul 20 ug Blocking Peptide	\$215 \$475 \$95
proDynorphin	GP10110	Guinea Pig IgG	M; R	IHC	50 ul 150 ul 20 ug Blocking Peptide	\$215 \$475 \$95

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Name	Catalog #	Type	Species	Applications	Size	Price
Endomorphin 1 and 2	RA21002	Rabbit IgG	H; M; Pr; R	IHC	50 ug	\$155
Endomorphin 2	RA10111	Rabbit IgG	Pr; R	IHC	100 ul 100 ug Blocking Peptide	\$245 \$95
beta-Endorphin	RA21004	Rabbit IgG	R	IHC	50 ul	\$155
Kappa Opioid Receptor	RA10103	Rabbit IgG	H; M	ICC; IHC	50 ul. 150 ul. Blocking Peptide-20 ug.	\$145 \$348 \$95
Kappa Opioid Receptor	MO15098	Mouse IgG	H; M; R	IHC	100 ug	\$255
Mu Opioid Receptor	GP10106	Guinea Pig IgG	H; Pr; R	ICC; IHC	50 ul 100 ul 50 ul Blocking Peptide @ 2mgs/ml	\$225 \$375 \$95
Mu Opioid Receptor	RA10104	Rabbit IgG	H; M; Pr; R	ICC; IHC; WB	50 ul 150 ul 50 ul Blocking Peptide @ 2mgs/ml	\$155 \$360 \$95
Mu Opioid Receptor	RA14138	Rabbit IgG	R	IHC; WB	100 ul	\$325
phospho-Mu Opioid Receptor (Ser375)	RA18001	Rabbit IgG	H; M	ICC; WB; IP	100 ul	\$330
MOR-1C	RA20001	Rabbit IgG	M; R	IHC	50 ul 150 ul	\$155 \$368
OPMC-L	RA26002	Rabbit IgG	H; M; R; Rb	IHC; WB	100 ul	\$375
ORL 1	RA14140	Rabbit IgG	H; M; R	IF; IHC	100 ul 100 ul@1mg/ml Blocking Peptide	\$365 \$95
ORL 1	RA14133	Rabbit IgG	H; M; R	IF; IHC	100 ul 100 ul@1mg/ml Blocking Peptide	\$275 \$95
Orphanin FQ/Nociceptin	RA10106	Rabbit IgG	H; M; R	IHC	50 ul 150 ul 50 ul. @ 2 mg/ml. Blocking Peptide	\$145 \$348 \$95
Orphanin FQ/Nociceptin	GP10107	Guinea Pig IgG	H; M; R	IHC	50 ul 150 ul 50 ul.@2 mg/ml. Blocking Peptide	\$155 \$348 \$95

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