NEUROMICS

Delta Opioid Receptor$^{3-17}$ Data Sheet

Catalog Number:	RA19072	**Host:**	Rabbit
Product Type:	Affinity Purified Antibody	**Species Reactivity:**	Rat; Human; Mouse
Immunogen Sequence:	Synthetic peptide comprising residues 3-17 LVPSARAELQSSPLV of the mouse and rat DOR-1 protein. Reacts with human DOR-1 as well.	**Format:**	Liquid. 100 ug in 100 ul (1 mg/ml) in PBS containing 0.02% sodium azide

Applications:
Western blot: 1:500-1,000 dilution
Immunohistochemistry: 1:500-1:15,000
Immunofluorescence: 1:4,000-1:60,000 (See PNAS July 20, 2010 vol. 107 no. 29 13117-13122.)

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

Storage: Maintain at +2-8°C for 3 months or at -20°C for longer periods. Stable for 1 year. *Avoid repeated freeze-thaw cycles.*

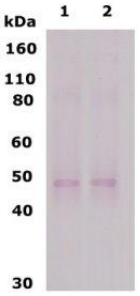
References:
Hai-Bo Wanga, Bo Zhaoa, Yan-Qing Zhonga, Kai-Cheng Li, Zi-Yan Li, Qiong Wang, Yin-Jing Lua, Zhen-Ning Zhang, Shao-Qiu He, Han-Cheng Zheng, Sheng-Xi Wu, Tomas G. M. Hökfelt, Lan Baob, and Xu Zhanga. Coexpression of δ- and μ-opioid receptors in nociceptive sensory neurons. PNAS July 20, 2010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

Application Notes

Western Blot:
The antibody may detect dimmers or trimers on a Western blot as heterodimerization and homodimerization is common with the opioid receptors; however the monomer should be the dominant DOR-1 band at about 48 kDa

Immunostaining.
Adult rats, mice, and Oprd1 exon 1-deleted mice were fixed. Cryostat sections of L4 and L5 DRGs and spinal cord segments were processed for immunofluorescence staining (13) with Rb anti-DOR13–17 (1:2,000–1:60,000; DiaSorin and 1:4,000–1:60,000; Neuromics), Rb anti-DOR12–18 (1:30,000–1:120,000; Alomone), Rb anti-DOR1358–372 (1:1,000–1:2,000; Lifespan Biosciences), Rb anti-MOR (1:1,000; Neuromics); guinea pig anti-SP (1:500; Neuromics), and mouse anti-CGRP (1:1,000; Biogenesis) antibodies. IB4-labeling was carried out with fluorescein-labeled GSL I-IB4 (1:200). The Myc-DOR1–transfected HEK293 cells and neurons were fixed and processed with mouse anti-Myc antibodies (1:500; DSHB). Nuclear DAPI staining was used to indicate HEK293 cells in control experiments. *See: PNAS July 20, 2010 vol. 107 no. 29 13117-13122.*

Image: Western blot analysis with DOR at a dilution of 1:500. Lane 1: 10 ug of human brain lysate and Lane 2: 10 ug rat brain lysate



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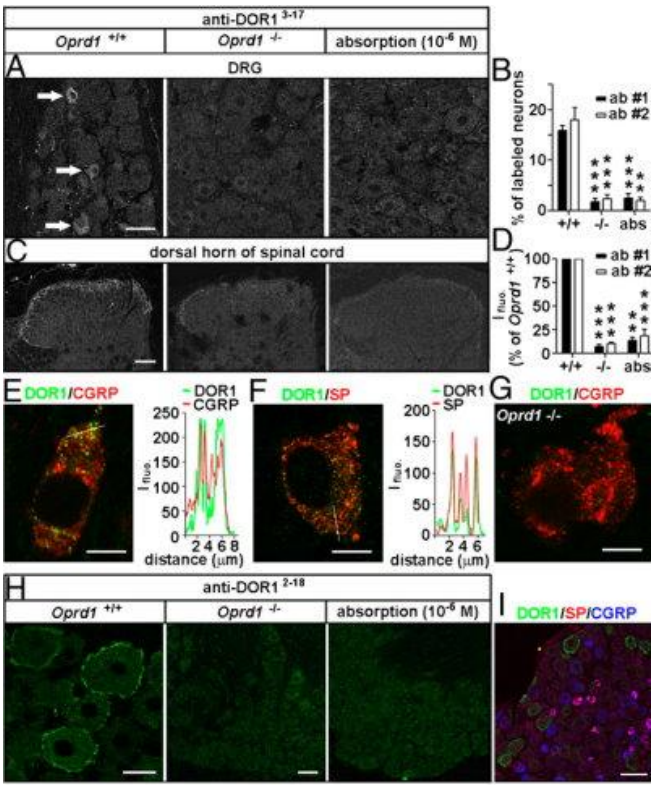
*Images: Distinct distribution patterns of DORs in subsets of DRG neurons of mice. Immunostaining with antibodies against DOR13–17 [A: 1:30,000, antibody 1 (ab #1); DiaSorin and C: antibody 2 (ab #2); Neuromics] shows DORs in small DRG neurons and afferent fibers in spinal laminae I–II. This immunostaining pattern is abolished by the antiserum preabsorption or the deletion of Oprd1 exon 1. Reduction in immunostaining is quantitatively assayed by determining the percentage of positive DRG neurons (B; n = 6) and fluorescence intensity (Ifluo.) in the laminae I–II (D; n = 5). **P < 0.01; ***P < 0.001. (Scale bars: A and C, 40 μm.). DOR labeling (anti-DOR13–17, 1:30,000; DiaSorin) associated with vesicles in peptidergic small DRG neurons (E and F) is absent in Oprd1 exon 1-deleted mice (G). Colocalization of DORs and neuropeptides is shown by correlated peaks of Ifluo. measured along lines. (Scale bar: 8 μm.) (H) Immunostaining with antibodies against DOR12–18 (1:60,000; Alomone) shows the presence of DORs on the cell surface of large DRG neurons of mice. (Scale bar: 25 μm.) This staining pattern is abolished by preabsorption and is absent in Oprd1 exon 1-deleted mice. (Scale bar: 80 μm.) (I) Triple-immunostaining shows that DOR+ large DRG neurons contain neither SP nor CGRP. (Scale bar: 80 μm.). www.pnas.org/cgi/doi/10.1073/pnas.1008382107*



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
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

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Name	Catalog #	Type	Species	Applications	Size	Price
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
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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