Product Datasheet

alpha-1A Adrenergic R/ADRA1A Antibody NB100-78585

Unit Size: 100 ul

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.



Publications: 8

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NB100-78585

alpha-1A Adrenergic R/ADRA1A Antibody

Product Information	
Unit Size	100 ul
Concentration	Concentrations vary lot to lot. See vial label for concentration. If unlisted please contact technical services.
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.01% Thimerosal
Isotype	IgG
Purity	Antigen Affinity-purified
Buffer	PBS (pH 7), 20% Glycerol
Target Molecular Weight	51 kDa
Product Description	
Host	Rabbit
Gene ID	148
Gene Symbol	ADRA1A
Species	Human, Mouse, Rat
Immunogen	Carrier-protein conjugated synthetic peptide encompassing a sequence within the center region of human alpha-1A Adrenergic R/ADRA1A. The exact sequence is proprietary.
Product Application Details	
Applications	Western Blot, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin
Recommended Dilutions	Western Blot 1:500-1:3000, Immunohistochemistry 1:100-1:1000, Immunocytochemistry/ Immunofluorescence 1:100-1:1000, Immunohistochemistry-Paraffin 1:100-1:1000

Images

Western Blot: alpha-1A Adrenergic R/ADRA1A Antibody [NB100-78585] ^{3A NO neuron α1-AR}

- Pooled lysates of laser-microdissected VMN nNOS- or GAD-

immunopositive neurons from groups of female rats pretreated with V versus ER alpha or beta antagonist prior to intra-VMN V or NE infusion were analyzed by Western blot alpha-1A Adrenergic R/ADRA1A protein expression. Nitrergic neuron alpha 1-, F(5, 12)=10.51, p=.0005 protein profiles are depicted in Panels 3A; GABAergic neuron alpha 1-, F(5, 12)=5.52, p=.007 protein profiles are presented in Panels 3D. Data show mean normalized protein O.D. measures+/-SEMfor the following treatment groups: Veh/Veh (n=6), MPP/Veh (n=6), PHTPP/Veh (n=6), Veh/NE (n=6), MPP/NE (n=6), and PHTPP/NE (n=6). *p<.05; **p<.01; ***p<.001. Image collected and cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/32233668/) licensed under a CC-BY license.



3D GABA neuron a1-AR





Immunocytochemistry/Immunofluorescence: alpha-1A Adrenergic R/ADRA1A Antibody [NB100-78585] - analysis of methanol-fixed Hep3B, using alpha 1a Adrenergic Receptor antibody at 1:500 dilution.

Immunohistochemistry-Paraffin: alpha-1A Adrenergic R/ADRA1A Antibody [NB100-78585] - Human heart, using alpha 1a Adrenergic

pH 8.0) buffer, 15min.





Western Blot: alpha-1A Adrenergic R/ADRA1A Antibody [NB100-78585] - A. Jurkat whole cell lysate/extract. B. Raji whole cell lysate/extract. C. NCI-H929 whole cell lysate/extract. 10 % SDS-PAGE alpha 1a Adrenergic Receptor antibody dilution: 1:1000	KDa A B C 130
Western Blot: alpha-1A Adrenergic R/ADRA1A Antibody [NB100-78585] - Sample (30 ug of whole cell lysate)A:Raji 10% SDS PAGE, antibody diluted at 1:1000.	KDa A 72 55 42 33

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Immunohistochemistry-Paraffin: alpha-1A Adrenergic R/ADRA1A Antibody [NB100-78585] - Mouse prostate. alpha 1a Adrenergic Receptor antibody dilution: 1:500. Antigen Retrieval: Trilogy™ (EDTA based, pH 8.0) buffer, 15min.

Immunohistochemistry-Paraffin: alpha-1A Adrenergic R/ADRA1A Antibody [NB100-78585] - Rat hind brain. alpha 1a Adrenergic Receptor antibody dilution: 1:500. Antigen Retrieval: Trilogy™ (EDTA based, pH 8.0) buffer, 15min.

 Veh
 MPP
 PHTPP
 Veh
 MPP
 PHTPP

 Veh
 NE

Western Blot: alpha-1A Adrenergic R/ADRA1A Antibody [NB100-78585] - Effects of MPP Versus PHTPP on NE Regulation of VMN Nitrergic & GABA Neuron Adrenergic Receptor Protein Expression. Pooled lysates of laser-microdissected VMN nNOS- or GAD-immunopositive neurons from groups of female rats pretreated with V versus ERα or -β antagonist prior to intra-VMN V or NE infusion were analyzed by Western blot for alpha1- (α 1-), alpha2- (α 2-), or beta1- (β 1-) AR protein expression. Nitrergic neuron $\alpha 1$ -, F(5, 12) = 10.51, p = .0005; $\alpha 2$ -, F(5, 12) = 16.50, p <.0001; & \beta1-, F(5, 12) = 11.72, p = .0003 protein profiles are depicted in Panels 3A to C; GABAergic neuron α 1-, F(5, 12) = 5.52, p = .007; α 2-, F (5, 12) = 10.47, p < .0001; & β1-, F(5, 12) = 12.21, p = .0002 protein profiles are presented in Panels 3D to F. Data show mean normalized protein O.D. measures ± SEM for the following treatment groups: Veh/Veh (solid white bars, n = 6), MPP/Veh (diagonal-striped white bars, n = 6), PHTPP/Veh (cross-hatched white bars, n = 6), Veh/NE (solid grav bars, n = 6), MPP/NE (diagonal-striped grav bars, n = 6), & PHTPP/NE (cross-hatched gray bars, n = 6). *p < .05; **p < .01; ***p < .001. α 1-AR = alpha1 adrenergic receptor; α 2-AR = alpha2 adrenergic receptor; β 1-AR = beta1 adrenergic receptor; MPP = 1,3-Bis(4-hydroxyphenyl)-4-methyl-5 -[4-(2-piperidinylethoxy)phenol]-1H-pyrazole dihydrochloride; PHTPP = 4 -[2-phenyl-5,7-bis(trifluoromethyl)pyrazolo[1,5-a]pyrimidin-3-yl]phenol; NE = norepinephrine. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/32233668), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Immunocytochemistry/ Immunofluorescence: alpha-1A Adrenergic R/ADRA1A Antibody [NB100-78585] - alpha-1A Adrenergic R/ADRA1A antibody detects alpha-1A Adrenergic R/ADRA1A protein at cytoplasm by immunofluorescent analysis.Sample: PG-4 cells were fixed in 4% paraformaldehyde at RT for 15 min.Green: alpha-1A Adrenergic R/ADRA1A stained by alpha-1A Adrenergic R/ADRA1A antibody (NB100 -78585) diluted at 1:500.Blue: Hoechst 33342 staining.Scale bar= 10 um.



Publications

Alhamyani A, Napit PR, Bheemanapally K et al. Glycogen phosphorylase isoform regulation of glucose and energy sensor expression in male versus female rat hypothalamic astrocyte primary cultures Molecular and cellular endocrinology 2022-06-16 [PMID: 35718260]

Guerra-Ojeda S, Marchio P, Suarez A et Al. Levamisole Impairs Vascular Function by Blocking ?-Adrenergic Receptors and Reducing NO Bioavailability in Rabbit Renal Artery Cardiovasc Toxicol 2024-06-14 [PMID: 38877381]

Alhamyani A, Mahmood ASMH, Alshamrani A et al. Central Type II Glucocorticoid Receptor Regulation of Ventromedial Hypothalamic Nucleus Glycogen Metabolic Enzyme and Glucoregulatory Neurotransmitter Marker Protein Expression in the Male Rat J Endocrinol Diabetes 2021-01-13 [PMID: 34258390] (Western Blot, Immunohistochemistry-Frozen, Immunocytochemistry/ Immunofluorescence)

Alhamyani A, Napit PR, Ali H et al. Ventrolateral ventromedial hypothalamic nucleus GABA neuron adaptation to recurring Hypoglycemia correlates with up-regulated 5'-AMP-activated protein kinase activity AIMS Neuroscience 2021-09-03 [PMID: 34877402]

Mahmood A S M H, Napit P R et al. Estrogen Receptor Involvement in Noradrenergic Regulation of Ventromedial Hypothalamic Nucleus Glucoregulatory Neurotransmitter and Stimulus-Specific Glycogen Phosphorylase Enzyme Isoform Expression. ASN Neuro 2020-03-04 [PMID: 32233668] (WB, Rat)

Uddin MM, Mahmood ASMH, Ibrahim MMH, Briski KP Sex-Dimorphic Estrogen Receptor Regulation of Ventromedial Hypothalamic Nucleus Glucoregulatory Neuron Adrenergic Receptor Expression in Hypoglycemic Male and Female Rats Brain Res. 2019-06-29 [PMID: 31265816] (WB, Rat)

Hasan Mahmood ASM, Mandal SK, Bheemanapally K et al. Norepinephrine control of ventromedial hypothalamic nucleus glucoregulatory neurotransmitter expression in the female rat: Role of monocarboxylate transporter function. Mol. Cell. Neurosci. 2019-01-17 [PMID: 30660767] (WB, Rat)

Ibrahim MMH, Alhamami HN, Briski KP. Norepinephrine Regulation of Ventromedial Hypothalamic Nucleus Metabolic Transmitter Biomarker and Astrocyte Enzyme and Receptor Expression: Impact of 5' AMP-Activated Protein Kinase. Brain Res. 2019-01-07 [PMID: 30629946] (WB, Rat)





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