

Product Datasheet

beta-1 Adrenergic R/ADRB1 Antibody NB600-978

Unit Size: 0.1 mg

Store at -20C. Avoid freeze-thaw cycles.

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NB600-978

beta-1 Adrenergic R/ADRB1 Antibody

Product Information

Unit Size	0.1 mg
Concentration	0.5 mg/ml
Storage	Store at -20C. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.02% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	Tris saline (20 mM Tris pH 7.3, 150 mM NaCl), 0.5% BSA
Target Molecular Weight	51 kDa

Product Description

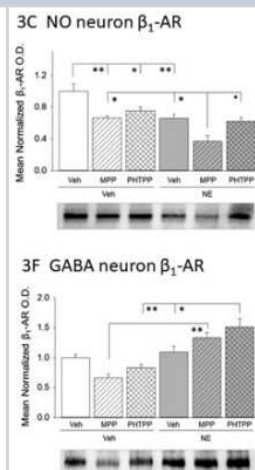
Host	Goat
Gene ID	153
Gene Symbol	ADRB1
Species	Human, Mouse, Rat
Reactivity Notes	Mouse reactivity reported in scientific literature (PMID: 16210849). Use in Rat reported in scientific literature (PMID: 29538413).
Immunogen	Peptide with sequence ESDEARRCYNDPK corresponding to internal region according to NP_000675.1.

Product Application Details

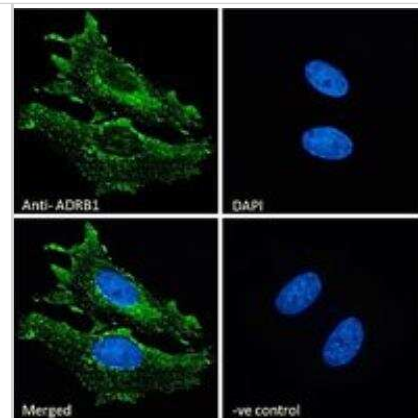
Applications	Western Blot, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry-Paraffin, In vitro assay, Peptide ELISA
Recommended Dilutions	Western Blot, Immunocytochemistry/ Immunofluorescence 10 ug/mL, Immunohistochemistry-Paraffin 4 - 6 ug/mL, In vitro assay, Peptide ELISA Detection limit 1:4000
Application Notes	Use in WB reported in scientific literature (PMID:35396348) .

Images

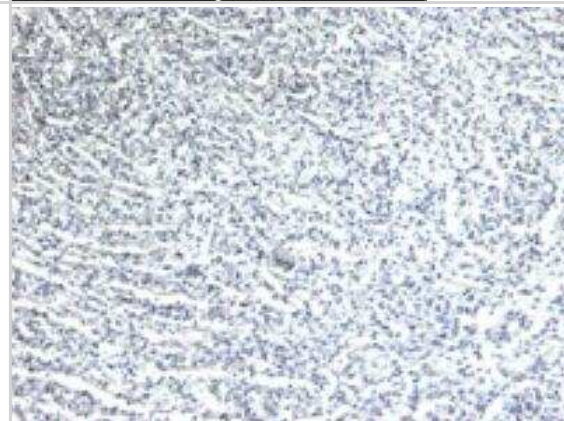
Western Blot: beta-1 Adrenergic R/ADRB1 Antibody [NB600-978] - Pooled lysates of laser-microdissected VMN nNOS- or GAD-immunopositive neurons from groups of female rats pretreated with V versus ER alpha or beta antagonist prior to intra-VMN V or NE infusion were analyzed by Western blot beta-1 Adrenergic R/ADRB1 protein expression. Nitroergic neuron beta 1-, F(5, 12)=11.72, p=.0003 protein profiles are depicted in Panels 3C; GABAergic neuron beta 1-, F(5, 12)=12.21, p=.0002 protein profiles are presented in Panels 3E. Data show mean normalized protein O.D. measures+/-SEM for 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.



Immunocytochemistry/Immunofluorescence: beta-1 Adrenergic R/ADRB1 Antibody [NB600-978] - Immunofluorescence analysis of paraformaldehyde fixed HeLa cells, permeabilized with 0.15% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml), showing membrane and cytoplasmic staining. The nuclear stain is DAPI (blue). Negative control: Unimmunized goat IgG (10ug/ml) followed by Alexa Fluor 488 secondary antibody (2ug/ml).



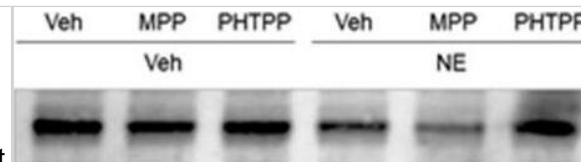
Immunohistochemistry-Paraffin: beta-1 Adrenergic R/ADRB1 Antibody [NB600-978] - Negative Control showing staining of paraffin embedded Human Heart, with no primary antibody.



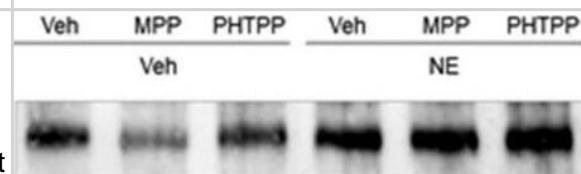
Immunohistochemistry-Paraffin: beta-1 Adrenergic R/ADRB1 Antibody [NB600-978] - Staining of paraffin embedded Human Heart with antibody at 6 ug/mL. Heat induced antigen retrieval with citrate buffer pH 6, HRP-staining.



Western Blot: beta-1 Adrenergic R/ADRB1 Antibody [NB600-978] - 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 ER α 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 α 1-, $F(5, 12) = 10.51$, $p = .0005$; α 2-, $F(5, 12) = 16.50$, $p < .0001$; & β 1-, $F(5, 12) = 11.72$, $p = .0003$ protein profiles are depicted in Panels 3A to C; GABAergic neuron α 1-, $F(5, 12) = 5.52$, $p = .007$; α 2-, $F(5, 12) = 10.47$, $p < .0001$; & β 1-, $F(5, 12) = 12.21$, $p = .0002$ protein profiles are presented in Panels 3D to F. Data show mean normalized protein O.D. measures \pm 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 gray bars, $n = 6$), MPP/NE (diagonal-striped gray 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.



Western Blot: beta-1 Adrenergic R/ADRB1 Antibody [NB600-978] - 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 ER α 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 α 1-, $F(5, 12) = 10.51$, $p = .0005$; α 2-, $F(5, 12) = 16.50$, $p < .0001$; & β 1-, $F(5, 12) = 11.72$, $p = .0003$ protein profiles are depicted in Panels 3A to C; GABAergic neuron α 1-, $F(5, 12) = 5.52$, $p = .007$; α 2-, $F(5, 12) = 10.47$, $p < .0001$; & β 1-, $F(5, 12) = 12.21$, $p = .0002$ protein profiles are presented in Panels 3D to F. Data show mean normalized protein O.D. measures \pm 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 gray bars, $n = 6$), MPP/NE (diagonal-striped gray 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.



Publications

Ikegami K, Masubuchi S Suppression of trabecular meshwork phagocytosis by norepinephrine is associated with nocturnal increase in intraocular pressure in mice Communications biology 2022-04-08 [PMID: 35396348] (WB, Human)

Akazawa Y, Taneike M, Ueda H et al. Rubicon-regulated beta-1 adrenergic receptor recycling protects the heart from pressure overload Scientific reports 2022-01-07 [PMID: 34996972] (ICC/IF, Mouse)

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 Mar 4 2020 12:00AM [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. Jun 29 2019 12:00AM [PMID: 31265816] (WB, Rat)

Wallukat G , Pruss H, Muller J , Schimke I. Functional autoantibodies in patients with different forms of dementia PLoS One 2018-03-14 [PMID: 29538413] (In vitro, Rat)





Novus Biologicals USA

10730 E. Briarwood Avenue
Centennial, CO 80112
USA
Phone: 303.730.1950
Toll Free: 1.888.506.6887
Fax: 303.730.1966
nb-customerservice@bio-techne.com

Bio-Techne Canada

21 Canmotor Ave
Toronto, ON M8Z 4E6
Canada
Phone: 905.827.6400
Toll Free: 855.668.8722
Fax: 905.827.6402
canada.inquires@bio-techne.com

Bio-Techne Ltd

19 Barton Lane
Abingdon Science Park
Abingdon, OX14 3NB, United Kingdom
Phone: (44) (0) 1235 529449
Free Phone: 0800 37 34 15
Fax: (44) (0) 1235 533420
info.EMEA@bio-techne.com

General Contact Information

www.novusbio.com
Technical Support: nb-technical@bio-techne.com
Orders: nb-customerservice@bio-techne.com
General: novus@novusbio.com

Products Related to NB600-978

NB600-978PEP	beta-1 Adrenergic R/ADRB1 Peptide
HAF017	Rabbit anti-Goat IgG Secondary Antibody [HRP (Horseradish Peroxidase)]
HAF109	Donkey anti-Goat IgG Secondary Antibody [HRP (Horseradish Peroxidase)]
NB410-28088-1mg	Goat IgG Isotype Control

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