

# Product Datasheet

## alpha-2A Adrenergic R/ADRA2A Antibody NBP2-22452

Unit Size: 100 uL

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

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### Publications: 4

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**NBP2-22452**

alpha-2A Adrenergic R/ADRA2A Antibody

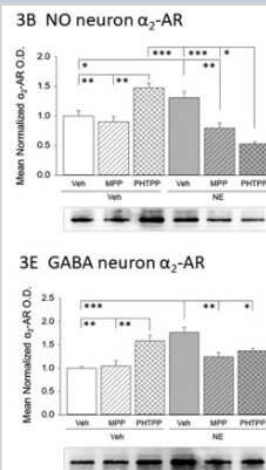
Product Information	
Unit Size	100 uL
Concentration	0.6 mg/ml
Storage	Store at -20C. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.05% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	PBS and 1 mg/ml BSA.

Product Description	
Description	Novus Biologicals Rabbit alpha-2A Adrenergic R/ADRA2A Antibody (NBP2-22452) is a polyclonal antibody validated for use in IHC, WB, ICC/IF and Simple Western. Anti-alpha-2A Adrenergic R/ADRA2A Antibody: Cited in 4 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Rabbit
Gene ID	150
Gene Symbol	ADRA2A
Species	Human, Mouse, Rat
Reactivity Notes	This antibody detects alpha-2A adrenergic receptor (A2AAR) from human, rat and mouse tissues.
Immunogen	Synthetic peptide corresponding to residues R(218) I Y Q I A K R R T R V P P S R R G(235) of the 3rd intracellular loop of human A2AAR.

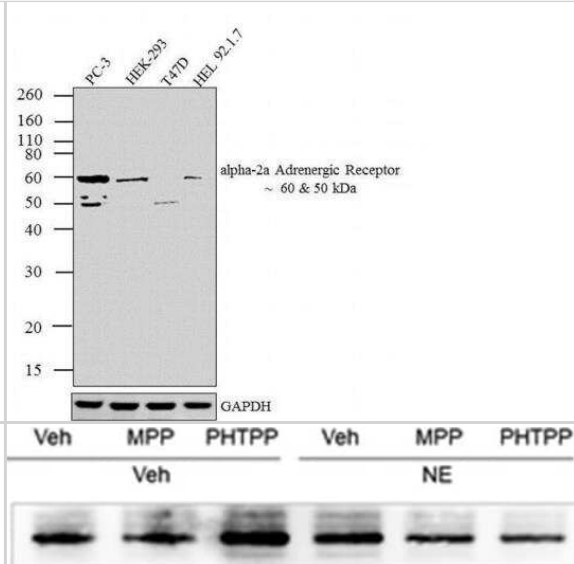
Product Application Details	
Applications	Western Blot, Simple Western, Immunohistochemistry-Paraffin, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry
Recommended Dilutions	Western Blot 1:500, Simple Western, Immunohistochemistry, Immunocytochemistry/ Immunofluorescence 0.25-2 ug/ml, Immunohistochemistry-Paraffin 1:1000

**Images**

Western Blot: alpha-2A Adrenergic R/ADRA2A Antibody [NBP2-22452] - 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-2A Adrenergic R/ADRA2A protein expression. Nitroergic neuron alpha2-, F(5, 12)=16.50, p<.0001 protein profiles are depicted in Panels 3B; GABAergic neuron alpha2-, F(5, 12)=10.47, p<.0001 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.

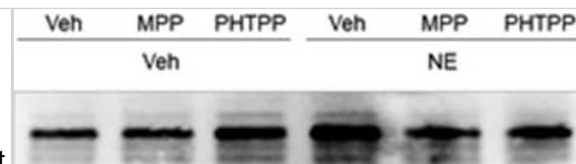


Western Blot: alpha-2A Adrenergic R/ADRA2A Antibody [NBP2-22452] - Analysis was performed on whole cell extracts (30 ug lysate) of PC-3 (Lane 1), HEK-293 (Lane 2), T47D (Lane 3) and HEL 92.1.7 (lane 4). The blots were probed with Anti-alpha-2a Adrenergic Receptor Rabbit Polyclonal Antibody.



Western Blot: alpha-2A Adrenergic R/ADRA2A Antibody [NBP2-22452] - Effects of MPP Versus PHTPP on NE Regulation of VMN Nitrenergic & 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 $\alpha$  or - $\beta$  antagonist prior to intra-VMN V or NE infusion were analyzed by Western blot for alpha1- ( $\alpha$ 1-), alpha2- ( $\alpha$ 2-), or beta1- ( $\beta$ 1-) AR protein expression. Nitrenergic neuron  $\alpha$ 1-,  $F(5, 12) = 10.51, p = .0005$ ;  $\alpha$ 2-,  $F(5, 12) = 16.50, p < .0001$ ; &  $\beta$ 1-,  $F(5, 12) = 11.72, p = .0003$  protein profiles are depicted in Panels 3A to C; GABAergic neuron  $\alpha$ 1-,  $F(5, 12) = 5.52, p = .007$ ;  $\alpha$ 2-,  $F(5, 12) = 10.47, p < .0001$ ; &  $\beta$ 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,  $n = 6$ ). \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .  $\alpha$ 1-AR = alpha1 adrenergic receptor;  $\alpha$ 2-AR = alpha2 adrenergic receptor;  $\beta$ 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: alpha-2A Adrenergic R/ADRA2A Antibody [NBP2-22452] - 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 $\alpha$  or - $\beta$  antagonist prior to intra-VMN V or NE infusion were analyzed by Western blot for alpha1- ( $\alpha$ 1-), alpha2- ( $\alpha$ 2-), or beta1- ( $\beta$ 1-) AR protein expression. Nitrergic neuron  $\alpha$ 1-,  $F(5, 12) = 10.51, p = .0005$ ;  $\alpha$ 2-,  $F(5, 12) = 16.50, p < .0001$ ; &  $\beta$ 1-,  $F(5, 12) = 11.72, p = .0003$  protein profiles are depicted in Panels 3A to C; GABAergic neuron  $\alpha$ 1-,  $F(5, 12) = 5.52, p = .007$ ;  $\alpha$ 2-,  $F(5, 12) = 10.47, p < .0001$ ; &  $\beta$ 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,  $n = 6$ ). \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .  $\alpha$ 1-AR = alpha1 adrenergic receptor;  $\alpha$ 2-AR = alpha2 adrenergic receptor;  $\beta$ 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

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

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)

Yang Z, Ma S, Cao R et al. CD49<sup>high</sup> Defines A Distinct Skin Mesenchymal Stem Cell Population Capable of Hair Follicle Epithelial Cell Maintenance J. Invest. Dermatol. 2019-09-05 [PMID: 31494092]

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)



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### **Products Related to NBP2-22452**

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NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control

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### **Limitations**

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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