Product Datasheet

RGS8 Antibody
NBP2-20153

Unit Size: 0.1 ml

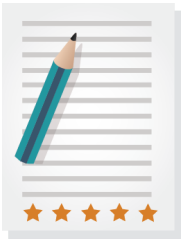
Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.

www.novusbio.com technical@novusbio.com

Publications: 5

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:
www.novusbio.com/NBP2-20153

Updated 9/25/2025 v.20.1



NBP2-20153

RGS8 Antibody

Product Information

Unit Size	0.1 ml
Concentration	Concentrations vary lot to lot. See vial label for concentration. If unlisted please contact technical services.
Storage	Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.01% Thimerosal
Isotype	IgG
Purity	Antigen Affinity-purified
Buffer	PBS, 1% BSA, 20% Glycerol
Target Molecular Weight	21 kDa

Product Description

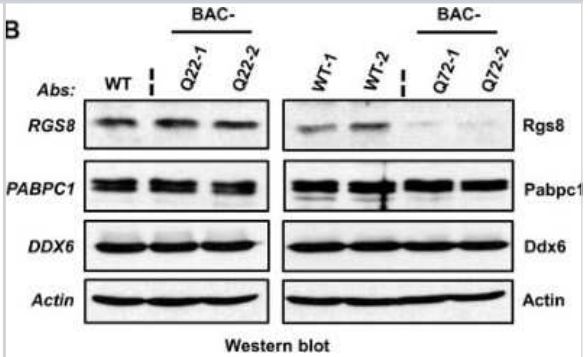
Description	Novus Biologicals Rabbit RGS8 Antibody (NBP2-20153) is a polyclonal antibody validated for use in WB. Anti-RGS8 Antibody: Cited in 5 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Rabbit
Gene ID	85397
Gene Symbol	RGS8
Species	Human, Mouse
Reactivity Notes	Mouse reactivity reported in scientific literature (PMID: 30194296).
Immunogen	Recombinant protein encompassing a sequence within the center region of human RGS8. The exact sequence is proprietary.

Product Application Details

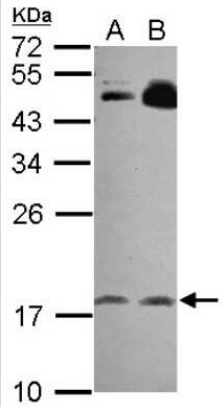
Applications	Western Blot
Recommended Dilutions	Western Blot 1:500-1:3000

Images

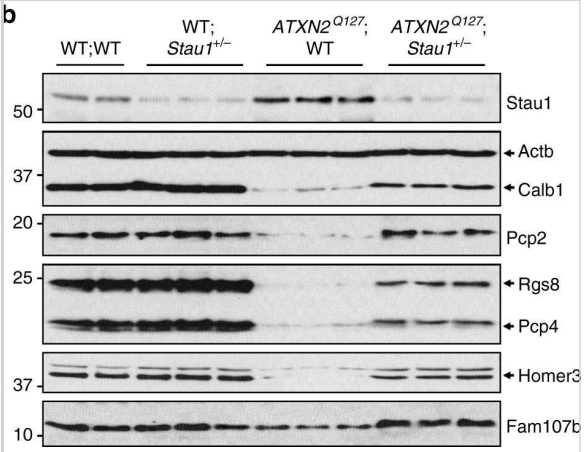
Western Blot: RGS8 Antibody [NBP2-20153] - Decreased steady-state levels of Rgs8 message and protein in BAC-Q72 mice.Western blot analyses indicate reduction of Rgs8 steady-state levels in cerebella of BAC-Q72 mice, but no change in BAC-Q22 mice when compared with wild-type mice. The blot is a representative Western blot of 3 independently performed experiments with 2 animals each per BAC line. Image collected and cropped by CiteAb from the following publication (//dx.plos.org/10.1371/journal.pgen.1005182) licensed under a CC-BY license.



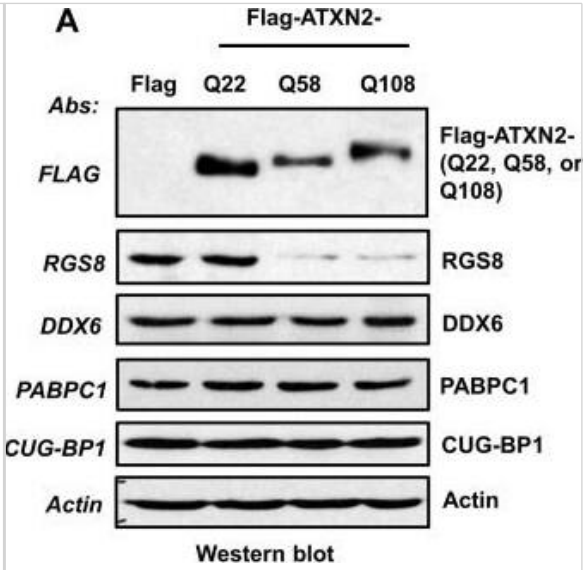
Western Blot: RGS8 Antibody [NBP2-20153] - Sample (30 ug of whole cell lysate) A: NT2D1 B: IMR32 12% SDS PAGE gel, diluted at 1:1000.



Silencing of STAU1 mitigates SCA2 phenotypes. aStau1 haploinsufficiency improves abnormal motor behavior of ATXN2Q127 mice as determined by rotarod behavior at 8, 12, 16, & 20 weeks of age. ATXN2Q127;Stau1+/- mice (green) have improved rotarod performance compared with ATXN2Q127 littermates (red) starting at 12 weeks of age. Note that Stau1 haploinsufficiency (orange) by itself does not alter motor function; n = 9–15 mice per group. Values shown are mean ± SE. Significance was determined using generalized estimating equations (GEE). NS, nonsignificant, *P < 0.05, **P < 0.01. b, c Reduction of Stau1 in vivo improves levels of key cerebellar proteins towards normalization. b Western blotting of cerebellar extracts from ATXN2Q127;Stau1+/- mice showing improvement of protein levels for Calb1, Pcp2, Rgs8, Pcp4, Homer3, & Fam107b towards normalization. Each lane represents cerebellar extract from an individual mouse. β-Actin is used as a loading control & the blots are from three replicate experiments. c Quantitative analysis of western blots shown in b. Data are mean ± SD, **P < 0.01, ***P < 0.001, Student t-test. d Combined immunostaining of ATXN2 (red) & Stau1 (green) of cerebellar sections from ATXN2Q127 & crossed ATXN2Q127;Stau1+/- mice (34 weeks of age) demonstrating reduced ATXN2-Stau1 aggregates in crossed ATXN2Q127;Stau1+/- mice. Scale bar, 30 μM. e Model for STAU1 in the pathology of SCA2 & other neurodegenerative diseases Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/30194296), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Western Blot: RGS8 Antibody [NBP2-20153] - Overexpression of mutant ATXN2 in human SH-SY5Y cells recapitulates down-regulation of in vivo steady-state levels of Rgs8 in BAC-Q72 mice.Cells were transfected with plasmids encoding Flag-tagged cDNAs of human ATXN2 containing Q22 or Q58 or Q108 repeats. Forty-eight hrs post-transfection, cells were selected with hygromycin (40 µg/ml) for 5–7 days & hygromycin resistant cells were harvested as two aliquots. (A) Protein extracts were prepared from one aliquot & subjected to Western blot analyses to measure steady-state levels of RGS8. The blots were re-probed for β-Actin as an internal loading control. (B) Quantitative RT-PCR analyses of synthesized cDNAs from the other aliquot demonstrate moderate reduction of RGS8 mRNA in cells expressing Flag-ATXN2-Q108. The data are means ± SD, *p<0.05. (C) Mutant ATXN2 specifically induces decrease of RGS8 expression. MYC-tagged RGS8 cDNA including 5' & 3' UTRs was cloned under the transcriptional control of the CMV promoter & transfected into short-term hygromycin selected SH-SY5Y cell lines expressing Flag-tagged ATXN2-Q22, -Q58 or -Q108. Forty-eight hrs post-transfection, levels of exogenous RGS8 are significantly decreased in cells expressing ATXN2-Q58 or -Q108 compared with cells expressing wild-type ATXN2-Q22. To control for equal transfection, we monitored levels of GFP, which was expressed as an independent cassette in the plasmid. Blots were re-probed for β-actin as an internal loading control. The blot represents one of three independent experiments. Image collected & cropped by CiteAb from the following publication (https://dx.plos.org/10.1371/journal.pgen.1005182), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Publications

Tejwani L, Ravindra NG, Lee C et al. Longitudinal single-cell transcriptional dynamics throughout neurodegeneration in SCA1 Neuron 2023-11-16 [PMID: 38016472] (WB, Mouse)

Details:
Dilution 1:1000

Figueroa K, Anderson C, Paul S et al. Slc9a6 mutation causes Purkinje cell loss and ataxia in the shaker rat bioRxiv 2022-03-30 [PMID: 36621975] (WB, Rat)

Paul S, Dansithong W, Figueroa KP et al. Staufen1 links RNA stress granules and autophagy in a model of neurodegeneration. Nat Commun 2018-09-07 [PMID: 30194296] (WB, Mouse)

Scoles DR, Meera P, Schneider MD et al. Antisense oligonucleotide therapy for spinocerebellar ataxia type 2. Nature. 2017-04-20 [PMID: 28405024] (WB)

Dansithong W, Paul S, Figueroa KP et al. Ataxin-2 Regulates RGS8 Translation in a New BAC-SCA2 Transgenic Mouse Model PLoS Genet. 2015-04-01 [PMID: 25902068] (WB, Human)

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 NBP2-20153

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

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.

For more information on our 100% guarantee, please visit www.novusbio.com/guarantee

Earn gift cards/discounts by submitting a review: www.novusbio.com/reviews/submit/NBP2-20153

Earn gift cards/discounts by submitting a publication using this product: www.novusbio.com/publications