

Product Datasheet

GFP Antibody [Biotin] NB100-1678

Unit Size: 0.2 mg

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

www.novusbio.com



technical@novusbio.com

Reviews: 3 **Publications: 11**

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:
www.novusbio.com/NB100-1678

Updated 10/23/2024 v.20.1

Earn rewards for product
reviews and publications.

Submit a publication at www.novusbio.com/publications

Submit a review at www.novusbio.com/reviews/destination/NB100-1678



NB100-1678

GFP Antibody [Biotin]

Product Information	
Unit Size	0.2 mg
Concentration	Please see the 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% Sodium Azide
Isotype	IgG
Conjugate	Biotin
Purity	Immunogen affinity purified
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2, 10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free

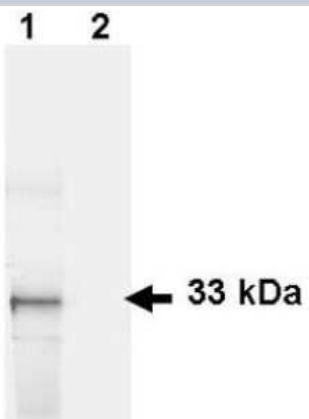
Product Description	
Description	<p>For extended storage aliquot contents and freeze at -20C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room</p> <p>This antibody was prepared from monospecific antiserum by immunoaffinity chromatography using Green Fluorescent Protein (<i>Aequorea victoria</i>) coupled to agarose beads followed by solid phase adsorption(s) to remove any unwanted reactivities. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Goat Serum, anti-biotin and purified and partially purified Green Fluorescent Protein (<i>Aequorea victoria</i>) Serum</p>
Host	Goat
Species	Non-species specific
Reactivity Notes	No reaction was observed against Human, or Rat serum proteins. Known Cross Reactivity: rGFP. YFP differs from GFP due to a mutation at Thr203Tyr; antibodies raised against full-length GFP should also detect YFP and other variants. Reactivity in transgenic mice with GFP. Reactivity in human cell lines transfected with a GFP construct.
Specificity/Sensitivity	No reaction was observed against Human, Mouse and Rat Serum Proteins.
Immunogen	The immunogen is a Green Fluorescent Protein (GFP) fusion protein corresponding to the full length amino acid sequence (246aa) derived from the jellyfish <i>Aequorea victoria</i> . (Uniprot: P42212)

Product Application Details	
Applications	Western Blot, ELISA, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin, Knockdown Validated, Knockout Validated
Recommended Dilutions	Western Blot 1:2000-1:10000, ELISA 1:50000-1:80000, Immunohistochemistry 1:1000-1:5000, Immunocytochemistry/ Immunofluorescence 1:100-1:1000, Immunohistochemistry-Paraffin 1:10-1:500, Immunohistochemistry-Frozen 1:10-1:500, Knockout Validated, Knockdown Validated
Application Notes	GFP Antibody is suitable for immunoblotting, ELISA, immunohistochemistry, immunomicroscopy as well as other antibody based assays using streptavidin or avidin conjugates requiring lot-to-lot consistency.

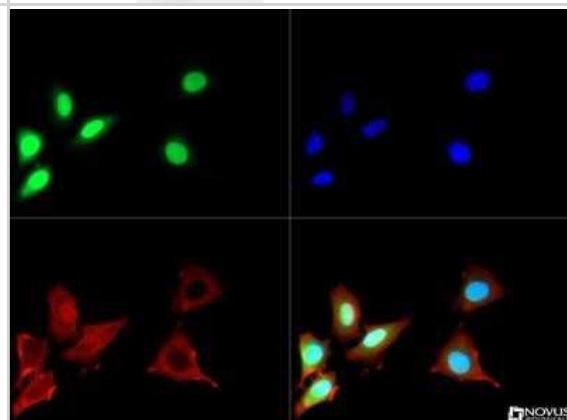


Images

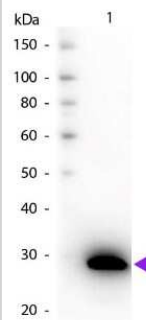
Lane 1: HeLa cells. Lane 2: mock transfected HeLa cell lysate. Load: 35 ug per lane. Primary antibody: GFP antibody at 1 ug/ml for 1 h at room temperature. Secondary antibody: IRDye 800 conjugated Donkey-a-Goat IgG [H&L] MX7 secondary antibody at 1:2,500 for 45 min at RT. Block: 5% BLOTTO overnight at 4C. Predicted/Observed size: 27 kDa, 33 kDa for GFP. Other band(s): none.



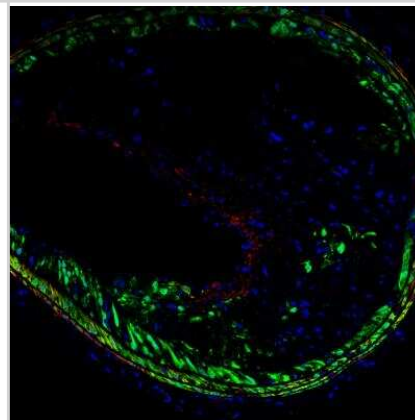
GFP-Biotin was tested in GFP-Hela cells against a Streptavidin conjugated 550 secondary. Hela-GFP are illuminated in Green and nuclei in Blue (DAPI).



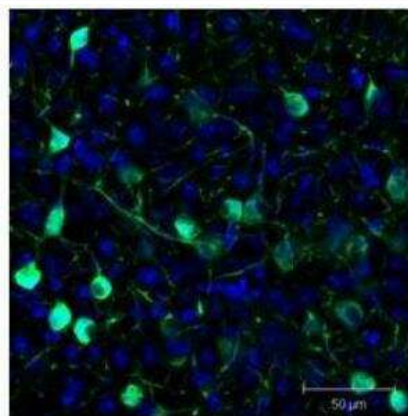
Lane 1: GFP. Lane 2: None. Load: 50 ng per lane. Primary antibody: GFP antibody Biotin conjugated at 1:1,000 for 60 min at RT. Secondary antibody: Peroxidase streptavidin secondary antibody at 1:40,000 for 30 min at RT. Blocking: incubated with blocking buffer for 30 min at RT. Predicted/Observed size: 28 kDa, 28 kDa for GFP. Other band(s): None.



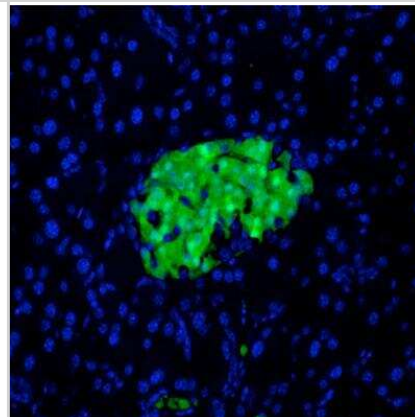
IF analysis of GFP in mouse aorta, liver, brain, and lung cells. Image courtesy of product review by Laura Shankman.



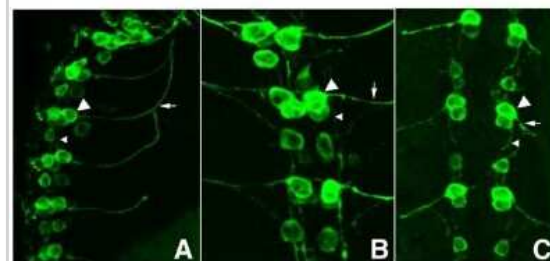
Tissue: Sf-1:Cre mice crossed to the Z/EG reporter line. Mouse brain (coronal view, 20X magnification). Fixation: 4%PFA/PBS with o/n fixation, and subsequently transferred to a 30% sucrose solution. Antigen retrieval: frozen in OCT freezing medium (Sakura) and cryostat sectioned at 40um. Primary antibody: Goat anti-GFP was used at 1:500 dilution in free floating IHC to detect GFP. Secondary antibody: Fluorochrome conjugated Anti-goat IgG secondary antibody was used for detection at 1:500 at 1:10,000 for 45 min at RT. Localization: Sf-1+ neurons and their processes of the ventromedial nucleus of the hypothalamus. Staining: eGFP as green fluorescent signal and sections were counterstained with DAPI.



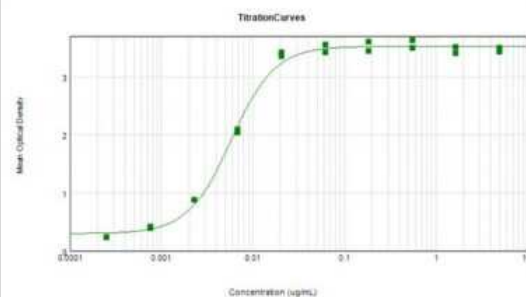
Staining of transgenic mouse pancreas, expressing GFP in beta cells. Image courtesy of product review by Dr. Yves Heremans of Vrije Universiteit Brussel.



Tissue: Drosophila melanogaster late stage embryonic central nervous system. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: Anti-GFP antibody at a 1:1,000 for 1 h at RT. Secondary antibody: AlexaFluor 488 conjugated anti-Goat antibody at 1:300 for 45 min at RT. Panel A: shows a lateral view (ventral left). Panels B and C: shows ventral views of whole mount embryos at 63x magnification (plus 2x digital zoom). In all panels, anterior is up. Staining: tau-GFP cell bodies (large arrowhead) and axons of motorneurons (arrow) and interneurons (small arrowhead) as green fluorescent signal.



ELISA Results of GFP antibody [Biotin] tested against purified GFP protein. Each well was coated in duplicate with 10ug/mL of GFP protein. The starting dilution of antibody was 5ug/mL and the X-axis represents the Log10 of a 3-fold dilution. This titration is a 4-parameter curve fit where the IC50 is defined as the titer of the antibody. Assay performed using 3% Fish Gel/PBS Blocking buffer and SA-HRP conjugated.



Publications

Kim K, Wann J, Kim HG et al. Uncoupling protein 1-driven Cre (Ucp1-Cre) is expressed in the epithelial cells of mammary glands and various non-adipose tissues bioRxiv : the preprint server for biology 2023-10-22 [PMID: 37905088] (Immunohistochemistry)

Abe I, Oguri Y, Verkerke ARP et al. Lipolysis-derived linoleic acid drives beige fat progenitor cell proliferation Developmental cell 2022-12-05 [PMID: 36473459] (IHC-P)

Details:

Dilution used in IHC-P 1:200

Li Y, Imai N, Nicholls HT et al. Thioesterase superfamily member 1 undergoes stimulus-coupled conformational reorganization to regulate metabolism in mice Nat Commun 2021-06-10 [PMID: 34108467] (ICC/IF)

Details:

This citation used the Biotin format of this antibody.

Li J, Li E, Czepielewski RS et al. Neurotensin is an anti-thermogenic peptide produced by lymphatic endothelial cells Cell Metab 2021-05-26 [PMID: 34038712]

Details:

Citation using the Biotin format of this antibody.

Sethi NS, Kikuchi O, Duronio GN et al. Early TP53 alterations engage environmental exposures to promote gastric premalignancy in an integrative mouse model Nat Genet 2020-02-07 [PMID: 32025000] (IHC-P)

Sonzogni O, Haynes J, Seifried LA et al. Reporters to mark and eliminate basal or luminal epithelial cells in culture and in vivo PLoS Biol 2018-06-21 [PMID: 29924804] (ICC/IF)

Roh HC, Tsai LTY, Shao M et al. Warming Induces Significant Reprogramming of Beige, but Not Brown, Adipocyte Cellular Identity Cell Metab 2018-04-17 [PMID: 29657031]

Relation T, Yi T, Guess AJ et al. Intratumoral Delivery of Interferongamma-Secreting Mesenchymal Stromal Cells Repolarizes Tumor-Associated Macrophages and Suppresses Neuroblastoma Proliferation In Vivo Stem Cells 2018-02-13 [PMID: 29430789] (ICC/IF)

Relation T, Yi T, Guess AJ et al. Mule Regulates the Intestinal Stem Cell Niche via the Wnt Pathway and Targets EphB3 for Proteasomal and Lysosomal Degradation Cell Stem Cell 2016-05-18 [PMID: 27184401] (IF/IHC)

Edelblute CM, Heller LC, Malik MA, Heller R. Activated air produced by shielded sliding discharge plasma mediates plasmid DNA delivery to mammalian cells Biotechnol Bioeng 2015-06-03 [PMID: 26041378]

Details:

This citation used the Biotin version of this antibody.

Long JZ, Svensson KJ, Tsai L et al. A Smooth Muscle-Like Origin for Beige Adipocytes Cell Metab 2014-04-02 [PMID: 24709624] (IHC-P)

Details:

This citation used the Biotin version of this antibody.



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 NB100-1678

NBP2-29370	Streptavidin Native Protein
BAF108	Goat IgG Isotype Control [Biotin]
NB100-56401PEP	GFP Antibody Blocking Peptide
NBC1-22949	Recombinant GFP Protein

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/NB100-1678

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

