Product Datasheet

GFP Antibody
NB100-1770

Unit Size: 0.1 mg

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

Reviews: 4  Publications: 63

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Updated 7/10/2018 v.20.1

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### Product Information

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unit Size</strong></td>
<td>0.1 mg</td>
</tr>
<tr>
<td><strong>Concentration</strong></td>
<td>Please see the vial label for concentration. If unlisted please contact technical services.</td>
</tr>
<tr>
<td><strong>Storage</strong></td>
<td>Store at -20C. Avoid freeze-thaw cycles.</td>
</tr>
<tr>
<td><strong>Clonality</strong></td>
<td>Polyclonal</td>
</tr>
<tr>
<td><strong>Preservative</strong></td>
<td>0.01% Sodium Azide</td>
</tr>
<tr>
<td><strong>Isotype</strong></td>
<td>IgG</td>
</tr>
<tr>
<td><strong>Purity</strong></td>
<td>Immunogen affinity purified</td>
</tr>
<tr>
<td><strong>Buffer</strong></td>
<td>0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2</td>
</tr>
</tbody>
</table>

### Product Description

<table>
<thead>
<tr>
<th>Parameter</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>Host</strong></td>
<td>Goat</td>
</tr>
<tr>
<td><strong>Gene Symbol</strong></td>
<td>GFP</td>
</tr>
<tr>
<td><strong>Species</strong></td>
<td>Jellyfish</td>
</tr>
<tr>
<td><strong>Reactivity Notes</strong></td>
<td>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 will a GFP construct. Mouse reactivity reported in multiple pieces of scientific literature.</td>
</tr>
</tbody>
</table>

### Specificity/Sensitivity

GFP antibody was prepared from monospecific antiserum by immunoaffinity chromatography using Green Fluorescent Protein (Aequorea victoria) 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 and purified and partially purified Green Fluorescent Protein (Aequorea victoria).

### Immunogen

The immunogen is a Green Fluorescent Protein (GFP) fusion protein corresponding to the full length amino acid sequence (246aa) derived from the jellyfish Aequorea victoria.

### Product Application Details

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Applications</strong></td>
<td>Western Blot, ELISA, Electron Microscopy, Flow Cytometry,</td>
</tr>
<tr>
<td></td>
<td>Immunocytochemistry/Immunofluorescence, Immunohistochemistry,</td>
</tr>
<tr>
<td></td>
<td>Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin,</td>
</tr>
<tr>
<td></td>
<td>Immunoprecipitation, Proximity Ligation Assay, Immunohistochemistry Free-Floating</td>
</tr>
<tr>
<td><strong>Recommended Dilutions</strong></td>
<td>Western Blot 1:400 - 1:2000, Flow Cytometry 1:10-1:1000, ELISA 1:40000,</td>
</tr>
</tbody>
</table>
**Application Notes**

Use in Immunohistochemistry-Frozen reported in scientific literature (PMID 24314556). Although not tested this antibody may be useful in Immunoprecipitation. Use in Immunohistochemistry free floating reported in scientific literature (PMID 24753232). Use in Electron Microscopy reported in scientific literature (PMID 24753232). Use in Proximity Ligation Assay reported in scientific literature (PMID 24470503). Use in FLOW cytometry reported in scientific literature (PMID 23682015).

**Images**


Immunocytochemistry/Immunofluorescence: GFP Antibody [NB100-1770] - Analysis of Biotin conjugate of NB100-1770. 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.

Immunocytochemistry/Immunofluorescence: GFP Antibody [NB100-1770] - Analysis using the Biotin conjugate of NB100-1770. Staining of GFP in mouse aorta, liver, brain, and lung cells. Image courtesy of product review by Laura Shankman.
Immunocytochemistry/Immunofluorescence: GFP Antibody [NB100-1770] - Antibody. Tissue: E5.5 Hex-GFP transgenic mouse embryo. Primary antibody: Goat anti-GFP was used at 1:500 dilution. Secondary antibody: Fluorochrome conjugated Anti-goat IgG secondary antibody at 1:10,000 for 45 min at RT. Staining: GFP as green fluorescent signal with DAPI blue counterstain.


Western Blot: GFP Antibody [NB100-1770] - Analysis using the Alkaline Phosphatase conjugate of NB100-1770. Detection of Lane 1: GFP. Detection of Lane 2: none. Load: 50 ng per lane. Alkaline Phosphatase GFP secondary antibody at 1:1000 for 60 min at RT. Predicted/Observed size: 28 kDa for GFP.

Immunocytochemistry/Immunofluorescence: GFP Antibody [NB100-1770] - HEK293 cells stable transfected with integrin alpha8-GFP, were immunostained for GFP (green) and counterstained with phalloidin (red) and DAPI (BLUE). Image from verified customer review.
Immunohistochemistry: GFP Antibody [NB100-1770] - GFP-positive transplanted NPCs have morphological features of hippocampal pyramidal neurons at day 90 after grafting. Image from verified customer review.

Western Blot: GFP Antibody [NB100-1770] - Comparison of fluorescence absorption and emission spectra for DyLight (TM) 488 and Alexa Fluor 488 in PBS, pH7.2. The emission spectra for this DyLight (TM) conjugate match the principle output wavelengths of most common fluorescence instrumentation.

Western Blot: GFP Antibody [NB100-1770] - Analysis using the FITC conjugate of NB100-1770. Detection of Lane 1: GFP. Detection of Lane 2: None. Load: 50ug per lane. Primary antibody: None. Secondary antibody: Fluorescein goat secondary antibody at 1:1,000 for 60 min at RT. Block: MB-070 for 30 min

Western Blot: GFP Antibody [NB100-1770] - Analysis using Biotin conjugate of NB100-1770. 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.
Western Blot: GFP Antibody [NB100-1770] - Analysis using Biotin conjugate of NB100-1770. 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.

Western Blot: GFP Antibody [NB100-1770] - Analysis using HRP conjugate of NB100-1770. Lane 1: 50ng of GFP. Lane 2: none. Primary antibody: none. Secondary antibody: Anti- Peroxidase Conjugate secondary antibody was used at 1:1000 for 45 min at RT. Block: 1% BSA-TTBS 30 min at 20C. Predicted/Observed size: 28 kDa for GFP. Other band(s): none

Immunocytochemistry/Immunofluorescence: GFP Antibody [NB100-1770] - Analysis using the Biotin conjugate of NB100-1770. Staining of GFP-Hela cells against a Streptavidin conjugated 550 secondary. Hela-GFP are illuminated in Green and nuclei in Blue (DAPI).

Immunocytochemistry/Immunofluorescence: GFP Antibody [NB100-1770] - 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 40 microns. Primary antibody: Goat anti-GFP was used at 1:500 dilution in free floating immunohistochemistry 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.
Immunocytochemistry/Immunofluorescence: GFP Antibody [NB100-1770] - Analysis of DyLight 488 conjugate of NB100-1770. Tissue: human breast carcinoma. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: Anti-Histone and Anti-Tubulin antibody at 10 ug/mL for 1 h at RT. Secondary antibody: DyLight (R) 488 c

ELISA: GFP Antibody [NB100-1770] - Analysis using the DyLight 488 conjugate of NB100-1770. Detection of Lane 1: His-Sumo-GFP. Lane: Molecular Weight. Detection of Lane 2: Beta-Galactosidase (negative control). Detection of Lane 3: recombinant GFP control protein. Load: 35 ug per lane. Primary antibody: none. Secondary antibody: DyLight (TM) 488 conjugated anti-GFP goat secondary antibody at 1:5,000. Block: MB-070 for 2 hr at RT. Predicted/Observed size: 27kDa/54kDa, 27kDa for rGFP/~45kDa His-Sumo-GFP.


Dontireddy DA. Identification of pulmonary PDGFRalpha-positive fibroblast specific miRNA and mRNA expression profiles during postnatal lung development. Thesis. 2015 (ICC/IF, Mouse)


Details:
This citation used the Biotin form of this antibody.


Huang B, Li X, Tu X et al. OTX1 regulates cell cycle progression of neural progenitors in the developing cerebral cortex. J. Biol. Chem. 2017 Dec 22 [PMID: 29273633] (Mouse)


Dontireddy DA. Identification of pulmonary PDGFRalpha-positive fibroblast specific miRNA and mRNA expression profiles during postnatal lung development. Thesis. 2015 (ICC/IF, Mouse)

Details:
Citation using the FITC form of this antibody.


More publications at http://www.novusbio.com/NB100-1770
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Products Related to NB100-1770

HAF109 Donkey anti-Goat IgG Secondary Antibody [HRP (Horseradish Peroxidase)]
HAF017 Rabbit anti-Goat IgG Secondary Antibody [HRP (Horseradish Peroxidase)]
NBP1-97023-1mg Goat IgG F(ab)2 Isotype Control
NBP2-34923-10ug Recombinant Jellyfish GFP Protein

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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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