

Datasheet: 4745-1051

BATCH NUMBER 163365

Description:	SHEEP ANTI GREEN FLUORESCENT PROTEIN
Specificity:	GREEN FLUORESCENT PROTEIN
Format:	Purified
Product Type:	Polyclonal Antibody
Isotype:	Polyclonal IgG
Quantity:	1 ml

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA	▪			
Western Blotting			▪	
Immunofluorescence	▪			

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using the appropriate negative/positive controls.

Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G.
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)
Approx. Protein Concentrations	IgG concentration 5.0 mg/ml
Immunogen	Green fluorescent protein from <i>Aequorea victoria</i> .
External Database	UniProt:

Links [P42212](#) [Related reagents](#)

RRID AB_619712

Specificity **Sheep anti Green Fluorescent Protein antibody** recognizes green fluorescent protein (GFP), a ~27 kDa protein derived from the jellyfish *Aequorea victoria*. GFP fluoresces green (509nm) when excited by blue light (395nm) and is commonly used as a marker of gene expression.

References

1. Mason, D.E. *et al.* (1987) Arterial blood gas tensions in the horse during recovery from anesthesia. [J Am Vet Med Assoc. 190 \(8\): 989-94.](#)
2. Soza-Ried, C. *et al.* (2008) Maintenance of thymic epithelial phenotype requires extrinsic signals in mouse and zebrafish. [J Immunol. 181: 5272-7.](#)
3. Shneider, N.A. *et al.* (2009) Gamma motor neurons express distinct genetic markers at birth and require muscle spindle-derived GDNF for postnatal survival. [Neural Dev. 4: 42.](#)
4. Siembab, V.C. *et al.* (2010) Target selection of proprioceptive and motor axon synapses on neonatal V1-derived Ia inhibitory interneurons and Renshaw cells. [J Comp Neurol. 518: 4675-701.](#)
5. Collins, R.T. *et al.* (2010) MAZe: a tool for mosaic analysis of gene function in zebrafish. [Nat Methods. 7: 219-23.](#)
6. Wu, L. *et al.* (2011) Properties of a distinct subpopulation of GABAergic commissural interneurons that are part of the locomotor circuitry in the neonatal spinal cord. [J Neurosci. 31 \(13\): 4821-33.](#)
7. Lopez, K.A. *et al.* (2011) Convection-enhanced delivery of topotecan into a PDGF-driven model of glioblastoma prolongs survival and ablates both tumor-initiating cells and recruited glial progenitors. [Cancer Res. 71: 3963-71.](#)
8. League, G.P. and Nam, S.C. (2011) Role of kinesin heavy chain in Crumbs localization along the rhabdome elongation in *Drosophila* photoreceptor. [PLoS One. 6:e21218.](#)
9. Haberlandt, C. *et al.* (2011) Gray matter NG2 cells display multiple Ca²⁺-signaling pathways and highly motile processes. [PLoS One. 6: e17575.](#)
10. Srinivasan, S. *et al.* (2012) The receptor tyrosine phosphatase Lar regulates adhesion between *Drosophila* male germline stem cells and the niche. [Development. 139: 1381-90.](#)
11. Cheung, L.S. *et al.* (2013) Dynamic model for the coordination of two enhancers of broad by EGFR signaling. [Proc Natl Acad Sci U S A. 110: 17939-44.](#)
12. Li, X. *et al.* (2013) Temporal patterning of *Drosophila* medulla neuroblasts controls neural fates. [Nature. 498: 456-62.](#)
13. Behnia, R. *et al.* (2014) Processing properties of ON and OFF pathways for *Drosophila* motion detection. [Nature. 512: 427-30.](#)
14. de Nooij, J.C. *et al.* (2015) The PDZ-domain protein Whirlin facilitates mechanosensory signaling in mammalian proprioceptors. [J Neurosci. 35 \(7\): 3073-84.](#)
15. Scotti, M. *et al.* (2015) A Hoxa13:Cre mouse strain for conditional gene manipulation in developing limb, hindgut, and urogenital system. [Genesis. 53 \(6\): 366-76.](#)
16. Sun, G.J. *et al.* (2015) Latent tri-lineage potential of adult hippocampal neural stem cells revealed by Nf1 inactivation. [Nat Neurosci. 18 \(12\): 1722-4.](#)
17. Crouch, E.E. *et al.* (2015) Regional and stage-specific effects of prospectively purified vascular cells on the adult V-SVZ neural stem cell lineage. [J Neurosci. 35 \(11\): 4528-39.](#)
18. Schlegel, P. *et al.* (2016) Synaptic transmission parallels neuromodulation in a central

- food-intake circuit. [eLife 2016;10.7554/eLife.16799](https://doi.org/10.7554/eLife.16799)
19. Gushchina, S. *et al.* (2018) Increased expression of colony-stimulating factor-1 in mouse spinal cord with experimental autoimmune encephalomyelitis correlates with microglial activation and neuronal loss. [Glia. 66 \(10\): 2108-25.](https://doi.org/10.1093/glia/ggz011)
 20. Sagner, A. *et al.* (2018) Olig2 and Hes regulatory dynamics during motor neuron differentiation revealed by single cell transcriptomics. [PLoS Biol. 16 \(2\): e2003127.](https://doi.org/10.1371/journal.pbio.1003127)
 21. Won, J.H. *et al.* (2019) ADAMTS Sol narae cleaves extracellular Wingless to generate a novel active form that regulates cell proliferation in *Drosophila*. [Cell Death Dis. 10 \(8\): 564.](https://doi.org/10.1080/15476281.2019.1644444)
 22. Balaskas, N. *et al.* (2019) Positional Strategies for Connection Specificity and Synaptic Organization in Spinal Sensory-Motor Circuits. [Neuron. 102 \(6\): 1143-1156.e4.](https://doi.org/10.1016/j.neuron.2019.05.014)
 23. Zhang, R. *et al.* (2019) Id4 Downstream of Notch2 Maintains Neural Stem Cell Quiescence in the Adult Hippocampus. [Cell Rep. 28 \(6\): 1485-1498.e6.](https://doi.org/10.1016/j.celrep.2019.05.014)
 24. Mukhtar, T. *et al.* (2020) Tead transcription factors differentially regulate cortical development. [Sci Rep. 10 \(1\): 4625.](https://doi.org/10.1038/s41598-020-64625-4)
 25. Heath, S.L. *et al.* (2020) Circuit Mechanisms Underlying Chromatic Encoding in *Drosophila* Photoreceptors. [Curr Biol. 30 \(2\): 264-275.e8.](https://doi.org/10.1016/j.cub.2020.01.014)
 26. Lee, S.R. *et al.* (2020) Regulation of epithelial integrity and organ growth by Tctp and Coracle in *Drosophila*. [PLoS Genet. 16 \(6\): e1008885.](https://doi.org/10.1371/journal.pgenet.1008885)
 27. Choquet, C. *et al.* (2020) Nkx2-5 defines distinct scaffold and recruitment phases during formation of the murine cardiac Purkinje fiber network. [Nat Commun. 11 \(1\): 5300.](https://doi.org/10.1038/s41467-020-18300-1)
 28. Del Valle Rodríguez, A. *et al.* (2020) A network approach to analyze neuronal lineage and layer innervation in the *Drosophila* optic lobes. [PLoS One. 15 \(2\): e0227897.](https://doi.org/10.1371/journal.pone.0227897)
 29. Poupault, C. *et al.* (2021) A combinatorial cis-regulatory logic restricts color-sensing Rhodopsins to specific photoreceptor subsets in *Drosophila*. [PLoS Genet. 17 \(6\): e1009613.](https://doi.org/10.1371/journal.pgenet.1009613)
 30. Oliver, K.M. *et al.* (2021) Molecular correlates of muscle spindle and Golgi tendon organ afferents. [Nat Commun. 12 \(1\): 1451.](https://doi.org/10.1038/s41467-021-24451-4)
 31. Zhu, H. *et al.* (2022) A comprehensive temporal patterning gene network in *Drosophila medulla* neuroblasts revealed by single-cell RNA sequencing. [Nat Commun. 13 \(1\): 1247.](https://doi.org/10.1038/s41467-022-2847-4)
 32. Parmigiani, E. & Giachino, C. (2022) Genetic Inactivation of Notch1 Synergizes with Loss of Trp53 to Induce Tumor Formation in the Adult Mouse Forebrain. [Cancers \(Basel\). 14 \(21\)Nov 02 \[Epub ahead of print\].](https://doi.org/10.3390/cancers14214192)
 33. Zhang, Y. *et al.* (2023) Notch-dependent binary fate choice regulates the Netrin pathway to control axon guidance of *Drosophila* visual projection neurons. [Cell Rep. 42 \(3\): 112143.](https://doi.org/10.1016/j.celrep.2023.112143)
 34. Liao, E.S. *et al.* (2023) Single-cell transcriptomic analysis reveals diversity within mammalian spinal motor neurons. [Nat Commun. 14 \(1\): 46.](https://doi.org/10.1038/s41467-023-4646-4)
 35. Zhang, Y. *et al.* (2023) Axon targeting of *Drosophila* medulla projection neurons requires diffusible Netrin and is coordinated with neuroblast temporal patterning. [Cell Rep. 42 \(3\): 112144.](https://doi.org/10.1016/j.celrep.2023.112144)

Further Reading

1. Adams, K.L. *et al.* (2015) Foxp1-mediated programming of limb-innervating motor neurons from mouse and human embryonic stem cells. [Nat Commun. 6: 6778.](https://doi.org/10.1038/ncomms6778)

Storage

This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for

short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

Guarantee	12 months from date of despatch
------------------	---------------------------------

Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/4745-1051 10040
--------------------------------------	--

Regulatory	For research purposes only
-------------------	----------------------------

Related Products

Recommended Secondary Antibodies

Rabbit Anti Sheep IgG (H/L) (5184-2304...) [Biotin](#)

Recommended Useful Reagents

[RABBIT ANTI RED FLUORESCENT PROTEIN \(AHP2987\)](#)

[MOUSE ANTI mCHERRY \(MCA6020\)](#)

[RABBIT ANTI mCHERRY \(AHP2326\)](#)

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Email: antibody_sales_us@bio-rad.com

Worldwide

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: antibody_sales_uk@bio-rad.com

Europe

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: antibody_sales_de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

'M381438:210512'

Printed on 18 Mar 2024

© 2024 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)