

Datasheet: 4745-1051

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 Links	UniProt:

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 rhabdomere 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 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](#)
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.](#)
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.](#)
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.](#)
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.](#)
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.](#)
24. Mukhtar, T. *et al.* (2020) Tead transcription factors differentially regulate cortical development. [Sci Rep. 10 \(1\): 4625.](#)
25. Heath, S.L. *et al.* (2020) Circuit Mechanisms Underlying Chromatic Encoding in *Drosophila* Photoreceptors. [Curr Biol. 30 \(2\): 264-275.e8.](#)
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.](#)
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.](#)
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.](#)
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.](#)
30. Oliver, K.M. *et al.* (2021) Molecular correlates of muscle spindle and Golgi tendon organ afferents. [Nat Commun. 12 \(1\): 1451.](#)
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.](#)
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 \(21\): 5409.](#)
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.](#)
34. Liau, E.S. *et al.* (2023) Single-cell transcriptomic analysis reveals diversity within mammalian spinal motor neurons. [Nat Commun. 14 \(1\): 46.](#)
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.](#)
36. Tsuboguchi, S. *et al.* (2023) TDP-43 differentially propagates to induce antero- and retrograde degeneration in the corticospinal circuits in mouse focal ALS models. [Acta Neuropathol. 146 \(4\): 611-29.](#)
37. Klima, M.L. *et al.* (2023) Anti-inflammatory effects of hunger are transmitted to the periphery via projection-specific AgRP circuits [Cell Reports. 42 \(11\): 113338.](#)
38. Hoang, P.T. *et al.* (2018) Subtype Diversification and Synaptic Specificity of Stem

- Cell-Derived Spinal Interneurons. [Neuron. 100 \(1\): 135-149.e7.](#)
39. Mukhtar, T. et al. (2022) Temporal and sequential transcriptional dynamics define lineage shifts in corticogenesis. [EMBO J. 41 \(24\): e111132.](#)
40. Leung, A.O.W. et al. (2024) Suppression of apoptosis impairs phalangeal joint formation in the pathogenesis of brachydactyly type A1. [Nat Commun. 15 \(1\): 2229.](#)

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.
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](#)

North & South America	Tel: +1 800 265 7376 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
'M429944:240501'

Printed on 27 Feb 2025