

IgG light chain (IVA285-1): sc-51643

BACKGROUND

The basic structural unit of most mammalian antibodies is a glycoprotein composed of four polypeptide chains, and two light chains, and two heavy chains, which are connected by disulfide bonds. Each light chain is composed of two domains, one variable domain (VL) and one constant domain (CL). The variable region genes encoding immunoglobulin κ and λ chains are assembled from three DNA segments, the V, C and J genes. Human κ light chain genes map to chromosome 2 and the human λ light chain genes map to chromosome 22. κ gene recombination can precede λ gene recombination during B cell ontogeny and only a single light chain type is expressed in individual B cells.

REFERENCES

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5. Król, M., Roterman, I., Piekarska, B., Konieczny, L., Rybarska, J., Stopa, B. and Spólnik, P. 2005. Analysis of correlated domain motions in IgG light chain of immunological signal transduction. *Proteins* 59: 545-554.
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8. Giritch, A., Marillonnet, S., Engler, C., van Eldik, G., Botterman, J., Klimyuk, V. and Gleba, Y. 2006. Rapid high-yield expression of full-size IgG antibodies in plants coinfecting with noncompeting viral vectors. *Proc. Natl. Acad. Sci. USA* 103: 14701-14706.
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SOURCE

IgG light chain (IVA285-1) is a mouse monoclonal antibody raised against a fraction of IgG of bovine origin.

PRODUCT

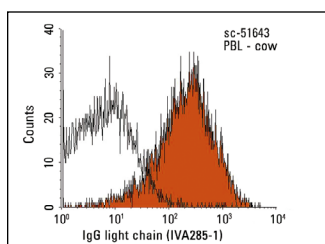
Each vial contains 100 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

IgG light chain (IVA285-1) is recommended for detection of IgG light chain of bovine origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 μ g per 1×10^6 cells).

Molecular Weight of IgG light chain: 25 kDa.

DATA



IgG light chain (IVA285-1): sc-51643. Indirect FCM analysis of peripheral blood leukocytes of cow origin stained with IgG light chain (IVA285-1), followed by PE-conjugated goat anti-mouse IgG: sc-3738. Black line histogram represents the isotype control, normal mouse IgG: sc-2025.

SELECT PRODUCT CITATIONS

1. Zhou, L.J., Chen, X.Y., Liu, S.P., Zhang, L.L., Xu, Y.N., Mu, P.W., Geng, D.F. and Tan, Z. 2017. Downregulation of cavin-1 expression via increasing caveolin-1 degradation prompts the proliferation and migration of vascular smooth muscle cells in balloon injury-induced neointimal hyperplasia. *J. Am. Heart Assoc.* 6: e005754.
2. Wang, X., Li, Z., Shao, Q., Zhang, C., Wang, J., Han, Z., Wang, S. and Qin, L. 2021. The intact parasympathetic nerve promotes submandibular gland regeneration through ductal cell proliferation. *Cell Prolif.* 54: e13078.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.