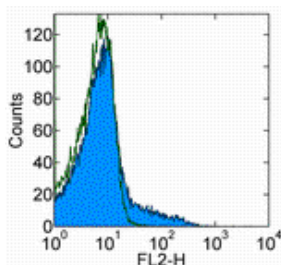


## Anti-Mouse/Rat 3G11 Sialoganglioside Antigen Purified

Catalog Number: 14-5443

RUO: For Research Use Only



Staining of BALB/c thymocytes with 0.5 µg of Mouse IgM Isotype Control Purified (cat. 14-4752) (open histogram) or 0.5 µg of Anti-Mouse/Rat 3G11 Sialoganglioside Antigen Purified (filled histogram) followed by Anti-Mouse IgM PE (cat. 12-5790). Cells in the lymphocyte gate were used for analysis.

### Product Information

**Contents:** Anti-Mouse/Rat 3G11 Sialoganglioside Antigen Purified

**REF** Catalog Number: 14-5443

**Clone:** eBio3G11 (SM3G11, 3G11)

**Concentration:** 0.5 mg/ml

**Host/Isotype:** Mouse IgM, κ

**Formulation:** aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer



**Temperature Limitation:** Store at 2-8°C.



**Batch Code:** Refer to Vial



**Use By:** Refer to Vial



**Caution, contains Azide**

### Description

The eBio3G11 monoclonal antibody reacts with the mouse 3G11 antigen. The 3G11 antibody was isolated as an autoantibody against the 3G11 sialylated carbohydrate antigen, which was found to be expressed by thymocytes and peripheral T cells, but not by B cells, myeloid cells or erythrocytes. 3G11 is expressed at higher levels on CD4+ T cells than on CD8+ T cells, however expression on both of these subsets decreases with advancing age. In thymus, 3G11 is expressed on approximately 20% of total thymocytes. 3G11 has also been used as a marker to distinguish naïve and memory T cells, as 3G11 is irreversibly down-regulated upon activation of CD4+ T cells. The 3G11 antibody is able to block binding of antibodies to CD3ε, suggesting close proximity of these two proteins.

Recently, it has been demonstrated that loss of 3G11 expression in experimental autoimmune encephalomyelitis (EAE) is associated with an anergic, regulatory T phenotype. Purified 3G11- T cells were able to suppress proliferation and cytokine production of 3G11+ T cells, and part of this effect was due to the secretion of IL-10.

### Applications Reported

This eBio3G11 (SM3G11, 3G11) antibody has been reported for use in flow cytometric analysis.

### Applications Tested

This eBio3G11 (SM3G11, 3G11) antibody has been tested by flow cytometric analysis of mouse splenocytes and thymocytes. This can be used at less than or equal to 1 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

### References

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Zhang GX, Yu S, Calida D, Zhao Z, Gran B, Kamoun M, Rostami A. Loss of the surface antigen 3G11 characterizes a distinct population of anergic/regulatory T cells in experimental autoimmune encephalomyelitis. *J Immunol.* 2006 Mar 15;176(6):3366-73. (**3G11**, FC, PubMed)

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expression profiles of CD45RB, Pgp-1, and 3G11 membrane antigens and in the patterns of lymphokine secretion by splenic CD4+ T cells from young and aged mice. J Immunol. 1990 Sep 1;145(5):1295-302. (3G11, FC, PubMed)

**Related Products**

11-4317 Streptavidin FITC

12-4317 Streptavidin PE

14-4752 Mouse IgM Isotype Control Purified

17-4317 Streptavidin APC

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