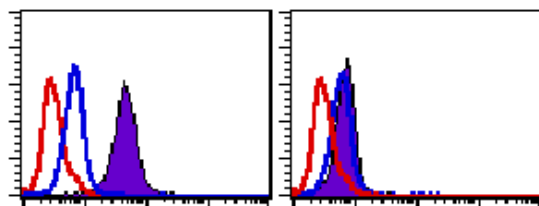


## Human Fc Receptor Binding Inhibitor Purified

Catalog Number: 14-9161

Also Known As: fc blocking


RUO: For Research Use Only



Staining of U937 cell line with Mouse IgG2a K Isotype Control FITC (left plot) (cat. 11-4724) or Mouse IgG2b K Isotype Control FITC (right plot) (cat. 11-4732) without (purple shading) or with (blue line) pre-treatment with Human Fc Receptor Binding Inhibitor Purified. The red line represents autofluorescence of U937 cells.

### Product Information

Contents: Human Fc Receptor Binding Inhibitor Purified

 Catalog Number: 14-9161

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 human FcγR-binding inhibitor can be used to inhibit the non-specific Fc-gamma receptor (FcγR)-mediated binding of mouse monoclonal antibodies used for flow cytometric analysis of human tissue. Four different classes of Fcγ receptors have been identified: FcγRI (CD64), FcγRII (CD32), FcγRIII (CD16), and FcγRIV, and they are expressed at varying levels in multiple cell lineages including high expression in myeloid, granulocyte and B cells. The biological function of the FcγR, including initiation of endocytosis, phagocytosis and antigen presentation, is elicited upon binding of host-immunoglobulin. The extent to which mouse monoclonal antibodies will bind to human FcγR varies depending on the isotype of the monoclonal antibody. Furthermore, different monoclonal antibodies of the same isotype will display different binding to human FcγRs.

### Applications Reported

Purified FcγR-binding inhibitor has been reported for use in flow cytometric analysis.

To inhibit the non-specific binding of mouse monoclonal antibodies add the human FcγR-binding inhibitor to sample and incubate on ice for 20 minutes. Without washing proceed to stain with primary antibody.

### Applications Tested

Purified human FcγR-binding inhibitor has been pre-titrated and tested by inhibiting binding of fluorochrome-conjugated isotype controls to U937 cells. This can be used at 20 μl 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.

### References

Nimmerjahn F, Ravetch JV. Fcγ receptors: old friends and new family members. *Immunity*. 2006 Jan;24(1):19-28. Review.

Gessner JE, Heiken H, Tamm A, Schmidt RE. The IgG Fc receptor family. *Ann Hematol*. 1998 Jun;76(6):231-48. Review.

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