Overview

Clone 2G8
Isotype Rat (LOU/M) IgG2aκ
Immunogen FcεR isolated from B cell lymphoma cell line M12.4.5
Specificity Mouse CD23; Mr 45-49 kDa
Alternate Name(s) FcεRII, BLAST-2, low affinity IgE receptor, Ly-42

Description

The CD23 antigen is the low affinity IgE Fc receptor, which is a 45-49 kDa protein with 38 and 28 kDa fragments. It is expressed on most mature, conventional B cells (but not on peritoneal CD5+ B cells) and can also be found on the surface of T cells, macrophages and platelets. It is distinct from the high affinity IgE receptors found on basophils and mast cells which mediate allergic reactions. The low affinity receptors are thought to play a role in isotype specific immunoregulation. The regulation of CD23 surface expression appears to be integral with the complex IgE system which involves interactions of cells, cytokines, antibodies and regulatory factors. CD23 has been described as a "membrane bound cytokine," in that the soluble cleavage products of CD23 are themselves able to act as cytokines in vitro.

Applications

FC – Quality tested 6-13
IHC-FS – Reported in literature 2
ELISA – Reported in literature 3-5

Working Dilutions

Flow Cytometry

Purified (UNLB) antibody ≤ 1 μg/10^6 cells
FITC and BIOT conjugates ≤ 1 μg/10^6 cells
PE, APC, and PE/CY7 conjugates ≤ 0.1 μg/10^6 cells
For flow cytometry, the suggested use of these reagents is in a final volume of 100 μL

Other Applications

Since applications vary, you should determine the optimum working dilution for the product that is appropriate for your specific need.

For Research Use Only. Not for Diagnostic or Therapeutic Use.
Handling and Storage

- The purified (UNLB) antibody is supplied as 0.5 mg of purified immunoglobulin in 1.0 mL of borate buffered saline, pH 8.2. No preservatives or amine-containing buffer salts added. Store at 2-8°C.
- The fluorescein (FITC) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The biotin (BIOT) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The R-phycoerythrin (PE) conjugate is supplied as 0.1 mg in 1.0 mL or 0.2 mg in 2.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. Do not freeze!
- The alloglycopenin (APC) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaN₃ and a stabilizing agent. Store at or below -20°C. Do not freeze!
- The low endotoxin, azide-free (LE/AF) antibody is supplied as 0.5 mg of purified immunoglobulin in 1.0 mL of PBS. Aliquot and store at or below -20°C.
- The R-phycoerythrin-Cyanine 7 (PE/CY7) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. Do not freeze!
- The endotoxin, azide-free (LE/AF) antibody is supplied as 0.5 mg of purified immunoglobulin in 1.0 mL of PBS. Aliquot and store at or below -20°C.
- Protect fluorochrome-conjugated forms from light. Reagents are stable for the period shown on the label if stored as directed.

Warning

Some reagents contain sodium azide. Please refer to product specific (M)SDS.

References


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Spectral Red® is a PE/Cy5 tandem conjugate.
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