Technical Data Sheet

Purified Rabbit Anti-Human CD88

Product Information

Material Number: 550733
Alternate Name: C5a Receptor
Size: 1 mL
Clone: C85-2506
Isotype: Rabbit IgG
Reactivity: QC Testing: Human
Storage Buffer: Aqueous buffered solution containing BSA, goat serum, and ≤0.09% sodium azide.

Description

The human C5a receptor (C5aR) is expressed on granulocytes, monocytes, macrophages, mast cells, human cell lines of myeloid origin, and certain cell types in several organs, including dendritic cells of secondary lymphoid organs, liver hepatocytes, lung bronchial and alveolar epithelial cells, lung vascular smooth muscle, endothelial cells, astrocytes, microglia, and fibroblast-like cells of the brain. The C85-2506 is a rabbit monoclonal antibody generated by fusion of splenocytes from rabbits immunized with human C5aR peptides and the rabbit fusion partner 240E-1.

Preparation and Storage

Store undiluted at 4°C.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Application Notes

Application

| Flow cytometry | Routinely Tested |
| Immunohistochemistry-frozen | Tested During Development |
| Immunohistochemistry-formalin (antigen retrieval required) | Tested During Development |

Flow cytometric analysis of CD88 expression on human granulocytes. Whole blood was stained with either Purified Rabbit Anti-Human CD88 (solid line histogram) or Purified Rabbit IgG (Jackson ImmunoResearch Cat. No. 011-000-003; dashed line histogram) at 1 µg/test, followed by FITC Goat Anti-Rabbit IgG (Cat. No. 554020). Erythrocytes were lysed with BD Pharm Lyse™ Lysing Buffer (Cat. No. 349202). Fluorescent histograms depicting CD88 (or Ig isotype control) expression were derived from gated events with the side and forward light-scattering characteristics of viable granulocytes.

Immunohistochemistry analysis of CD88 expression on human tonsil paraffin sections. Dendritic cells (Left Panel) or granulocytes (Right Panel) from human tonsil sections were stained with Purified Rabbit Anti-Human CD88 (2.5 µg/ml; Cat. No. 550733), followed by Biotinylated Donkey Anti-Rabbit Ig (5 µg/ml; Jackson ImmunoResearch Cat. No. 711-065-152) and Streptavidin HRP (Cat. No. 550946).
Recommended Assay Procedure:

**Immunohistochemistry:** The purified C85-2506 clone can be used for immunohistochemistry to detect expression of the human C5aR. The antibody has been tested on frozen and fixation of paraffin sections of human tonsil and paraffin sections of human spleen, liver, colon and lung. The dilution range recommended for this antibody is 1-10 to 1-20. The C85-2506 clone does not cross react with C5aR expressed on mouse, rat, pig or monkey tissue. Using biotinylated donkey anti-rabbit Ig (Jackson ImmunoResearch) as the secondary antibody, followed by a peroxidase-based detection system, the expression of C5aR was observed on dendritic cells, granulocytes and monocytes of human tonsil.

**Suggested Companion Products**

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<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
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<tbody>
<tr>
<td>554656</td>
<td>Stain Buffer (FBS)</td>
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<td>554657</td>
<td>Stain Buffer (BSA)</td>
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<td>550338</td>
<td>Biotin Goat Anti-Rabbit IgG</td>
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<td>554020</td>
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<td>349202</td>
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<tr>
<td>555899</td>
<td>Lysing Buffer</td>
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**Product Notices**

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. An isotype control should be used at the same concentration as the antibody of interest.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
5. Sodium azide is a reversible inhibitor of oxidative metabolism; therefore, antibody preparations containing this preservative agent must not be used in cell cultures nor injected into animals. Sodium azide may be removed by washing stained cells or plate-bound antibody or dialyzing soluble antibody in sodium azide-free buffer. Since endotoxin may also affect the results of functional studies, we recommend the NA/LE (No Azide/Low Endotoxin) antibody format, if available, for in vitro and in vivo use.
6. Please refer to www.regdocs.bd.com to access safety data sheets (SDS).

**References**

Fayyazi A, Sandau R, Duong LQ. C5a receptor and interleukin-6 are expressed in tissue macrophages and stimulated keratinocytes but not in pulmonary and intestinal epithelial cells. *Am J Pathol.* 1999; 154(2):495-501. (Biology)


Morelli A, Larregina A, Chuluyan I, Kolkowski E, Fainboim L. Expression and modulation of C5a receptor (CD88) on skin dendritic cells. Chemotactic effect of C5a on skin migratory dendritic cells. *Immunology.* 1996; 89(1):126-134. (Biology)


Paradisis PM, Campbell IL, Barnum SR. Elevated complement C5a receptor expression on neurons and glia in astrocyte-targeted interleukin-3 transgenic mice. *Glia.* 1998; 24(3):338-345. (Biology)

