

Datasheet



Mouse mAb to **CD46**
Clone **EBS-CD-028**
Isotype **IgG1-κ**

Source

A BALB/c mouse was immunized with stimulated human PBL.
Fusion partner: NS-1.

Specifications

EBS-CD-028 reacts with CD46 or Membrane Cofactor Protein (MCP; 52-74 kDa) All nucleated human cells carry CD46, which has multiple common protein isoforms of 52 kDa to 66 kDa, and 74 kDa on placental cells and some transformed cells. CD46 acts as a cofactor for complement factor I, a serine protease, which protects autologous cell against complement-mediated injury by cleaving C3b and C4b deposited on host tissue. It may further be involved in the fusion of the spermatozoa with the oocyte during fertilization. CD46 acts as a co-stimulatory factor for T-cells, which induces the differentiation of CD4⁺ into T-regulatory 1 cells. T-regulatory 1 cells suppress immune responses by secreting interleukin-10, and therefore are thought to prevent autoimmunity. A number of viral and bacterial pathogens seem to exploit this property and directly induce an immunosuppressive phenotype in T-cells by binding to CD46.

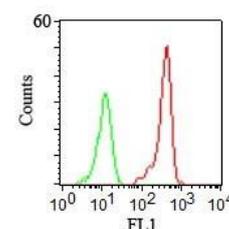


Figure 1: Human PBL stained with EBS-CD-028 (FACS).

Species reactivity

Positive: human.

Applications

EBS-CD-028 can be applied to test complement activation in pseudo-allergic reactions to acetylsalicylic acid and to test for measles virus infections of cells.

Flow cytometry	Frozen sections	Immunofluorescence
+	+	+

Format

Produced in tissue culture, contains no host Ig. Antibodies are affinity purified and presented in PBS with 0,02% sodium azide.

Stored at 4°C-8°C, shelf life is at least 24 months after purchase.

Dilution advice

- Flow cytometry (0,5-1,0 µg/million cells in 0,1 ml).
- Immunofluorescence (0,5-1,0 µg/ml).
- Immunohistology (1-2 µg/ml for 30 min at RT; an appropriate antigen retrieval method for staining of formalin-fixed tissues has not been established to date).

Positive control

HeLa, K-562 or MOLT-4 cells, kidney.

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References

- Iwata, K., et al. *J. Biol. Chem.* **270**: 15148-15152 (1995).
- Liszewski, M.K., et al. *Adv. Immunol.* **61**: 201-283 (1996).
- Liszewski, M.K., et al. *J. Immunol.* **156**: 4415-4421 (1996).