

Product Information

Anti-DCAL-1 antibody, Mouse monoclonal

Clone UW50, purified from hybridoma cell culture

SAB4200231

Product Description

Monoclonal Anti-DCAL-1 (mouse IgM isotype) is derived from the hybridoma UW50 produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice immunized with a human DCAL-1 (GeneID: 160365) fusion protein. The isotype is determined using Mouse Monoclonal Antibody Isotyping Reagents (Cat. No. ISO2). The antibody is purified from culture supernatant of hybridoma cells grown in a bioreactor.

Monoclonal Anti-DCAL-1 recognizes human DCAL-1. The product may be used by flow cytometry.¹

Dendritic cell (DC)-associated lectin-1 (DCAL1), also known as C-type lectin-like-1 (CLECL1), is a type II transmembrane, C-type lectin-like protein, expressed on dendritic cells (DCs) and B cells, but not in T cells and monocytes. It interacts with subsets of T cells as a costimulatory molecule that enhances interleukin-4 production by CD4⁺ T cells. Ligation of DCAL-1 expressed by immature DCs induces the phosphorylation of p44/42 and JNK MAPKs and the upregulation of MHC class II expression, resulting in a partially mature DC phenotype that may have an important immunoregulatory role.¹⁻²

Reagent

Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide as a preservative.

Antibody concentration: ~ 1.0 mg/mL

Precautions and Disclaimer

This product is for research use only, not for drug, household, or other uses.

Storage/Stability

For continuous use, store at 2-8 °C for up to one month. For extended storage, freeze at -20 °C in working aliquots. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

Flow cytometry: a working concentration of 0.25-0.50 µg/test is recommended using 1x10⁶ human Raji cells.

Note: In order to obtain the best results using various techniques and preparations, we recommend determining optimal working dilutions by titration.

References

1. Ryan, E.J., et al., *J. Immunol.*, **169**, 5638-5648 (2002).
2. Ryan, E.J., et al., *Hum. Immunol.*, **70**, 1-5 (2009).

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