3050 Spruce Street, St. Louis, MO 63103 USA
Tel: (800) 521-8956 (314) 771-5765 Fax: (800) 325-5052 (314) 771-5757
email: techservice@sial.com sigma-aldrich.com

Product Information

Monoclonal Anti-C10orf54 antibody produced in mouse clone ORF.4, purified from hybridoma cell culture

Catalog Number **SAB4200644**

Product Description

Monoclonal Anti-C10orf54 (mouse IgG1 isotype) is derived from the hybridoma ORF.4 produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice immunized with a synthetic peptide corresponding to a sequence at the internal region of human C10orf54 (GeneID: 64115), conjugated to KLH. The isotype is determined by ELISA using Mouse Monoclonal Antibody Isotyping Reagents, Catalog Number ISO2. The antibody is purified from culture supernatant of hybridoma cells grown in a bioreactor.

Monoclonal Anti-C10orf54 recognizes human C10orf54. The product may be used in several immunochemical techniques including flow cytometry and Immunohistochemistry.

C10orf54 also known as B7H5, Platelet receptor GI24 precursor, VISTA (V-domain Ig suppressor of T cell activation), SISP1 (stress-induced secreted protein 1) or Dies1 (Differentiation of Embryonic Stem Cells 1) is a novel member of the B7 immunoglobulin superfamily. C10orf54 have a unique structural feature different from other B7 family members. It consists of a single IgV domain and lacks the IgC domain. C10orf54 is preferentially expressed on mature myeloid APCs, and to a less extent on T cells. Nevertheless, it was also suggested to be a new differentiation-dependent adipocyte plasma membrane protein whose expression is required for effective adipogenesis.
During inflammatory response, C10orf54 expression is induced in T cells and myeloid cell. It was suggested to function as a co-inhibitory ligand through an unknown receptor by inhibiting T cell proliferation and cytokine production and by arresting cell cycle. In contrast, C10orf54 was also found to act as a positive regulator and a substrate of MT1-MMP (trans-membrane type 1-matrix metalloproteinase), and thus contributes to tumor-invasive growth.[1-4]

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 R&D use only, not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

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 dilution of 10 µg/test is recommended using human platelets.

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

References

1. Jung, K. and Choi, I., *Immune Netw.*, **13**, 184-193 (2013).
2. Sakr, M.A., et al., *Cancer Sci.*, **101**, 2368-2374 (2010).
3. Wang, L., et al., *J. Exp. Med.*, **208**, 577–592 (2011).
4. Ren, G., et al., *PLoS One.*, **8**, e65531 (2013).

GG, AI,PHC 02/16-1