

Anti-Mouse CD70 SAFIRE Purified

Catalogue Number : 02812-25

RUO: For Research Use Only. Not for use in diagnostic procedures.

Product Information

Clone: FR70

Format/Conjugate: SAFIRE Purified

Concentration: 1 mg/mL

Reactivity: Mouse

Laser: Not Applicable

Peak Emission: Not Applicable

Peak Excitation: Not Applicable

Filter: Not Applicable

Brightness (1=dim,5=brightest): Not Applicable

Isotype: Rat IgG2b, kappa

Formulation: Phosphate-buffered aqueous solution, pH7.2.

Storage: Product should be kept at 2-8°C.

Applications: FC, FA

Description

The FR70 monoclonal antibody specifically binds to mouse CD70, a 30-33 kDA type II transmembrane protein and member of the TNF superfamily. CD70 is the ligand for CD27 and is expressed on dendritic cells, activated B cell, and a subset of activated T cells at lower levels. Its main role is in regulating B cell activation and immunoglobulin synthesis. CD70 expressing cells are able to co-stimulate T cell proliferation and upregulate cytokine production. The FR70 antibody is reported to block the binding of CD70 to CD27.

Preparation & Storage

The product should be stored undiluted at 4°C. Do not freeze. The monoclonal antibody was purified utilizing affinity chromatography. The endotoxin level is determined by LAL test to be less than 0.01 EU/μg of the protein.

Application Notes

The antibody has been analyzed for quality through the flow cytometric analysis of the relevant cell type. It is recommended that the reagent be titrated for optimal performance for each application.

References

1. Tesselaar, K., Gravestien, L. A., Van Schijndel, G. M., Borst, J., Van Lier, R. A. (1997). Characterization of murine CD70, the ligand of the TNF receptor family member CD27.; *The Journal of Immunology*;;159(10), 4959-4965.
2. Oshima, H., Nakano, H., Nohara, C., Kobata, T., Nakajima, A., Jenkins, N. A., ... Okumura, K. (1998). Characterization of murine CD70 by molecular cloning and mAb.; *International immunology*;;10(4), 517-526.
3. Bullock, T. N., Yagita, H. (2005). Induction of CD70 on dendritic cells through CD40 or TLR stimulation contributes to the development of CD8+ T cell responses in the absence of CD4+ T cells.; *The Journal of Immunology*;;174(2), 710-717.