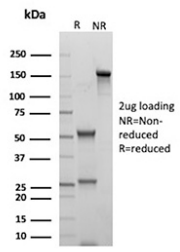
CD70 Antibody Mouse Monoclonal [clone TNFS7/1026] (V3034)

Catalog No.	Formulation	Size
V3034-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3034-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3034SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	TNFS7/1026
Purity	Protein G affinity chromatography
UniProt	P32970
Localization	Cell surface
Applications	ELISA (order BSA/sodium azide-free format for coating) Functional studies (order BSA/sodium azide-free format) Flow cytometry: 1-2ug/million cells Immunofluorescence: 1-2ug/ml
Limitations	This CD70 antibody is available for research use only.



SDS-PAGE Analysis of Purified CD70 Antibody Mouse Monoclonal (clone TNFS7/1026). Confirmation of Purity and Integrity of Antibody.

Description

CD70 antibody recognizes CD70 molecule, also known as CD27 ligand antibody and Tumor necrosis factor ligand superfamily member 7 antibody, a type II transmembrane protein that belongs to the tumor necrosis factor ligand superfamily. CD70 is encoded by the CD70 gene and is primarily expressed on activated T cells, B cells, and dendritic cells, where it functions as the ligand for CD27. CD70 Antibody Mouse Monoclonal (Clone TNFS7/1026) targets this activation-induced costimulatory molecule for research applications investigating immune regulation and lymphoid tissue biology.

CD70 plays a central role in adaptive immune responses through interaction with CD27 on T cells. Engagement of CD27 by CD70 promotes T cell proliferation, survival, and differentiation, particularly in the development of effector and memory T cell populations. CD70-CD27 signaling also enhances B cell activation and supports immunoglobulin production. Under physiologic conditions, CD70 expression is tightly regulated and transient, appearing upon immune cell activation and diminishing after resolution of the immune response to prevent excessive stimulation.

CD70 antibody studies have gained importance in oncology and immunotherapy research. Aberrant or sustained CD70 expression has been documented in several hematologic malignancies, including Hodgkin lymphoma, diffuse large B cell lymphoma, and certain leukemias. CD70 expression has also been observed in solid tumors such as renal cell carcinoma and glioblastoma. Persistent CD70 signaling may contribute to immune dysregulation, tumor progression, and T cell exhaustion, making the CD70-CD27 axis a target for therapeutic antibody development.

The CD70 protein contains an extracellular tumor necrosis factor homology domain responsible for receptor binding and a short intracellular cytoplasmic region. As a member of the tumor necrosis factor ligand superfamily, CD70 participates in signaling networks that shape immune activation and tolerance. The CD70 gene is located on chromosome 19p13.3, and its expression is regulated at transcriptional and post-transcriptional levels to maintain immune homeostasis.

Clone TNFS7/1026 is a mouse monoclonal antibody that recognizes CD70 and supports detection of CD70 expression in research models. By targeting CD70 with specificity, this antibody facilitates investigation of T cell costimulation, tumor immunology, and immune checkpoint-related pathways involving the CD70-CD27 signaling axis.

Application Notes

The concentration stated for each application is a general starting point. Optimal dilution of the CD70 antibody should be determined by the researcher.

Immunogen

Recombinant human protein was used as the immunogen for the CD70 antibody.

Storage

Store the CD70 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

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