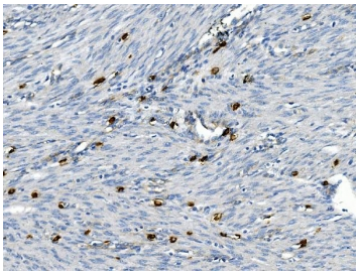
TNFRSF8 Antibody / CD30 (RQ5772)

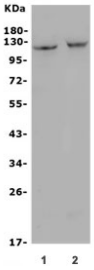
Catalog No.	Formulation	Size
RQ5772	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

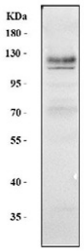
Availability	1-3 business days
Species Reactivity	Human, Mouse
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	P28908
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry : 1-2ug/ml
Limitations	This TNFRSF8 antibody is available for research use only.



IHC staining of FFPE human endometrial carcinoma with TNFRSF8 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot testing of mouse 1) RAW264.7 and 2) ANA-1 cell lysate with TNFRSF8 antibody. Predicted molecular weight: 53-120 kDa depending on glycosylation level.



Western blot testing of human K562 cell lysate with TNFRSF8 antibody. Predicted molecular weight: 53-120 kDa depending on glycosylation level.

Description

TNFRSF8 antibody is a key reagent for investigating immune regulation, lymphocyte activation, and cancer biology. The encoded protein, CD30, is a member of the tumor necrosis factor receptor superfamily expressed on activated T and B lymphocytes. CD30 acts as a costimulatory receptor, modulating proliferation, survival, and cytokine production. Its restricted expression in normal tissues, coupled with strong upregulation in certain lymphoid malignancies, makes CD30 both a functional regulator of immunity and a clinically significant biomarker.

CD30 interacts with its ligand, CD30L (TNFSF8), to activate intracellular signaling cascades. Engagement of CD30 triggers NF-kB and MAPK pathways, promoting cell activation and survival while influencing differentiation outcomes. In T cells, CD30 has been shown to regulate Th2-type immune responses, while in B cells it supports proliferation during activation. These roles position TNFRSF8 as an important mediator of adaptive immunity.

Clinically, CD30 is best known as a diagnostic marker for Hodgkin lymphoma and anaplastic large cell lymphoma (ALCL). High expression of TNFRSF8 on malignant cells has enabled its use in immunohistochemical diagnosis and targeted therapies. The development of antibody-drug conjugates, such as brentuximab vedotin, demonstrates the therapeutic value of CD30-directed strategies. Ongoing studies are exploring additional roles for TNFRSF8 in autoimmune disease and viral infections, further expanding its biomedical relevance.

At the molecular level, TNFRSF8 is a type I transmembrane protein with extracellular cysteine-rich domains characteristic of the TNF receptor family. Its intracellular tail lacks intrinsic enzymatic activity but recruits TRAF proteins and other adaptors to propagate downstream signals. Through these interactions, CD30 integrates external cues with transcriptional responses that shape lymphocyte fate and immune outcomes.

The TNFRSF8 antibody is commonly applied in immunohistochemistry, flow cytometry, western blotting, and immunofluorescence to detect CD30 expression in normal and pathological tissues. These applications are especially important for lymphoma diagnostics and research into T cell biology. For investigators studying immune costimulation, cancer pathogenesis, or targeted therapeutics, the TNFRSF8 antibody offers a reliable detection tool. NSJ Bioreagents supplies rigorously validated antibodies to ensure reproducibility and precision in advanced molecular research.

Application Notes

Optimal dilution of the TNFRSF8 antibody should be determined by the researcher.

Immunogen

Amino acids HGNPSHYYDKAVRRCCYR from the human protein were used as the immunogen for the TNFRSF8 antibody.

Storage

After reconstitution, the TNFRSF8 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.