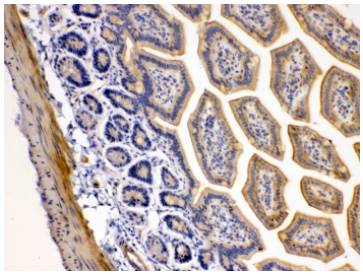
DR5 Polyclonal Antibody / CD262 Rabbit Polyclonal Antibody (R32639)

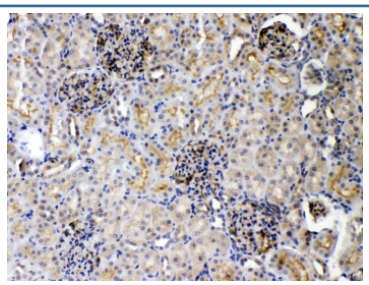
Catalog No.	Formulation	Size
R32639	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

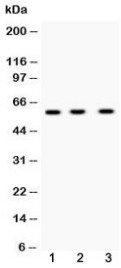
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA, 0.025% sodium azide
UniProt	O14763
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 1-2ug/ml Flow cytometry: 1-3ug/million cells
Limitations	This DR5 Polyclonal Antibody / CD262 Rabbit Polyclonal Antibody is available for research use only.



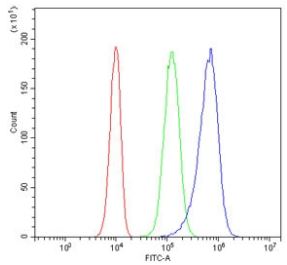
DR5 Polyclonal Antibody IHC Staining of Mouse Intestine Tissue. Immunohistochemical analysis of FFPE mouse intestine tissue using CD262 Rabbit Polyclonal Antibody at 1 ug/ml. Brown DAB immunoreactivity is observed in intestinal epithelial cells, including glandular structures and the mucosal surface, with a heterogeneous distribution across the tissue. Heat-induced epitope retrieval was performed by steaming sections in citrate buffer at pH 6 for 20 minutes, followed by cooling before staining.



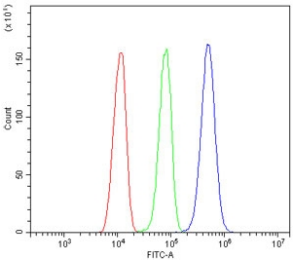
DR5 Polyclonal Antibody IHC Staining of Rat Kidney Tissue. Immunohistochemical analysis of FFPE rat kidney tissue using CD262 Rabbit Polyclonal Antibody at 1 ug/ml. Brown DAB immunoreactivity is observed in renal tubular epithelial cells, with heterogeneous staining across the tissue and comparatively limited staining in some surrounding regions. Heat-induced epitope retrieval was performed by steaming sections in citrate buffer at pH 6 for 20 minutes, followed by cooling before staining.



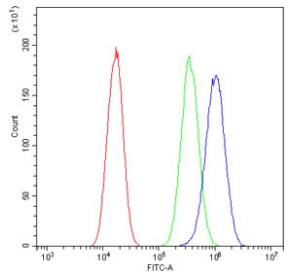
DR5 Polyclonal Antibody WB Analysis of Rat Thymus, Mouse Heart and Human K562 Lysates. Western blot analysis of rat thymus (lane 1), mouse heart (lane 2), and human K562 cell lysates (lane 3) using CD262 Rabbit Polyclonal Antibody at 0.5 ug/ml. An immunoreactive band is detected near 55-60 kDa in all three samples. DR5 has a predicted molecular weight of approximately 48 kDa but is frequently observed near 60 kDa, consistent with the documented glycosylation of this transmembrane receptor.



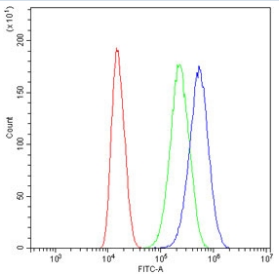
DR5 Polyclonal Antibody FACS Staining of Human PC-3 Cells. Flow cytometry analysis of human PC-3 prostate cancer cells using CD262 Rabbit Polyclonal Antibody at 1 ug per million cells following blocking with goat serum. The blue histogram represents DR5 antibody-stained cells, the green histogram represents the isotype control, and the red histogram represents unstained cells. A rightward fluorescence shift is observed in the antibody-stained population relative to both controls, demonstrating DR5 detection by flow cytometry.



DR5 Polyclonal Antibody FACS Staining of Human THP-1 Cells. Flow cytometry analysis of human THP-1 monocytic leukemia cells using CD262 Rabbit Polyclonal Antibody at 1 ug per million cells following blocking with goat serum. The blue histogram represents DR5 antibody-stained cells, the green histogram represents the isotype control, and the red histogram represents unstained cells. The antibody-stained population exhibits a rightward fluorescence shift relative to both controls, demonstrating DR5 detection in THP-1 cells.



DR5 Polyclonal Antibody FACS Staining of Human A549 Cells. Flow cytometry analysis of human A549 lung carcinoma cells using CD262 Rabbit Polyclonal Antibody at 1 ug per million cells following blocking with goat serum. The blue histogram represents DR5 antibody-stained cells, the green histogram represents the isotype control, and the red histogram represents unstained cells. A rightward fluorescence shift is observed in the antibody-stained population relative to the isotype control, demonstrating DR5-associated staining in A549 cells.



DR5 Polyclonal Antibody FACS Staining of Human U-87 MG Cells. Flow cytometry analysis of human U-87 MG glioblastoma cells using CD262 Rabbit Polyclonal Antibody at 1 ug per million cells following blocking with goat serum. The blue histogram represents DR5 antibody-stained cells, the green histogram represents the isotype control, and the red histogram represents unstained cells. A modest rightward fluorescence shift is observed in the antibody-stained population relative to the isotype control, demonstrating DR5-associated staining in U-87 MG cells.

Description

DR5 Polyclonal Antibody / CD262 Rabbit Polyclonal Antibody targets death receptor 5 (DR5), a transmembrane signaling protein encoded by the TNFRSF10B gene. Also known as CD262, TRAIL receptor 2 (TRAILR2), and KILLER, DR5 belongs to the tumor necrosis factor receptor superfamily and regulates programmed cell death. It binds tumor necrosis factor-related apoptosis-inducing ligand (TRAIL), encoded by TNFSF10, and initiates signaling through the extrinsic apoptotic pathway. Unlike TRAIL decoy receptors, DR5 contains a functional intracellular death domain capable of recruiting proteins required for caspase activation.

DR5 contains extracellular cysteine-rich domains, a transmembrane segment, and a cytoplasmic death domain. Binding of TRAIL promotes receptor clustering and assembly of the death-inducing signaling complex (DISC). This complex recruits the adaptor protein FADD and initiator procaspases, particularly procaspase-8, leading to proteolytic activation of downstream caspases. Activated caspase-8 can directly activate executioner caspases or cleave BID to engage mitochondrial apoptotic signaling. These events contribute to the coordinated elimination of damaged, infected, or otherwise abnormal cells.

DR5 signaling is regulated by receptor expression, intracellular trafficking, glycosylation, and the availability of pro-apoptotic and anti-apoptotic proteins. TNFRSF10B transcription can increase in response to cellular stress through pathways involving p53 and other transcription factors. Depending on cellular context, TRAIL receptor activation can also stimulate non-apoptotic signaling pathways, including NF-kappaB and MAP kinase cascades. These responses may influence inflammation, cellular migration, and survival rather than apoptosis. The balance between these signaling outcomes depends on receptor organization and the molecular environment within individual cells.

DR5 is an important focus of cancer research because TRAIL-mediated apoptosis can contribute to the elimination of malignant cells. However, tumor cells may develop resistance through altered death receptor expression, impaired caspase activation, or increased anti-apoptotic signaling. Therapeutic approaches targeting DR5 have been investigated as strategies for promoting tumor-cell death, although receptor activation does not uniformly produce apoptosis across cancer types. DR5 Polyclonal Antibody supports investigations of TNFRSF10B expression, death receptor regulation, apoptotic signaling, and mechanisms associated with cancer-cell survival.

For an alternative monoclonal antibody targeting this apoptosis-regulating receptor, see our DR5 Antibody DR5/3381, validated for immunohistochemistry and supported by human protein microarray specificity analysis.

Application Notes

Optimal dilution of the DR5 Polyclonal Antibody / CD262 Rabbit Polyclonal Antibody should be determined by the researcher.

Immunogen

Amino acids K233-S440 from the human protein were used as the immunogen for the DR5 antibody.

Storage

After reconstitution, the DR5 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

Death receptor 5 antibody, TRAIL receptor 2 antibody, TRAILR2 antibody, TRAIL R2 antibody, CD262 antibody, KILLER antibody, TNF receptor superfamily member 10B antibody, Tumor necrosis factor receptor superfamily member 10B antibody, TRICK2 antibody, TRICK2A antibody, TRICK2B antibody, TRICKB antibody, ZTNFR9 antibody, KILLER/DR5 antibody

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