

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human DcR3/TNFRSF6B in ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant human (rh) TRAIL R1, rhTRAIL R2, rhTRAIL R3, and rhTRAIL R4 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant human DcR3/TNFRSF6B Val24-His300 Accession # O95407
Endotoxin Level	<0.10 EU per 1 µg of the antibody by the LAL method.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

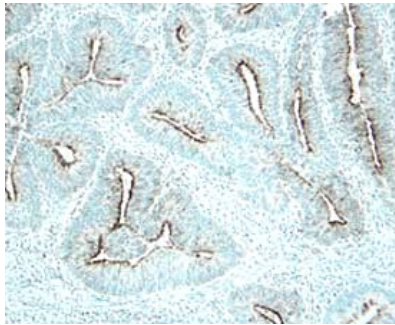
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Human DcR3/TNFRSF6B Fc Chimera (Catalog # 142-DC)
Immunohistochemistry	5-15 µg/mL	See Below
Neutralization	Measured by its ability to neutralize DcR3/TNFRSF6B-mediated inhibition of apoptosis in the Jurkat human acute T cell leukemia cell line. The Neutralization Dose (ND ₅₀) is typically 0.1-0.5 µg/mL in the presence of 50 ng/mL Recombinant Human DcR3/TNFRSF6B Fc Chimera, 2 ng/mL Recombinant Human Fas Ligand/TNFSF6.	

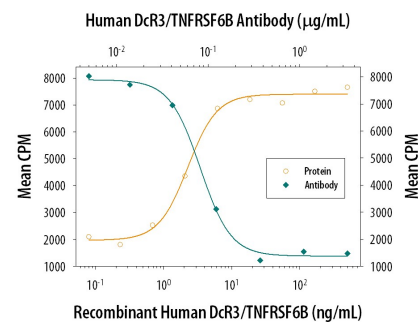
DATA

Immunohistochemistry



DcR3/TNFRSF6B in Human Stomach Cancer Tissue.
DcR3/TNFRSF6B was detected in immersion fixed paraffin-embedded sections of human stomach cancer using 10 µg/mL Goat Anti-Human DcR3/TNFRSF6B Antigen Affinity-purified Polyclonal Antibody (Catalog # AF142) overnight at 4 °C. Before incubation with the primary antibody tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained with the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). Specific labeling was localized to the membrane of epithelial cells in gastric glands. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

Neutralization



DcR3/TNFRSF6B Inhibition of Fas Ligand/TNFSF6-induced Apoptosis and Neutralization by Human DcR3/TNFRSF6B Antibody.
In the presence of a cross-linking antibody, Mouse polyHistidine Monoclonal Antibody (10 µg/mL, Catalog # MAB050), Recombinant Human DcR3/TNFRSF6B Fc Chimera (Catalog # 142-DC) inhibits Recombinant Human Fas Ligand/TNFSF6 (Catalog # 126-FL) induced apoptosis in the Jurkat human acute T cell leukemia cell line in a dose-dependent manner (orange line). Under these conditions, inhibition of Recombinant Human Fas Ligand/TNFSF6 (2 ng/mL) activity elicited by Recombinant Human DcR3/TNFRSF6B Fc Chimera (50 ng/mL) is neutralized (green line) by increasing concentrations of Goat Anti-Human DcR3/TNFRSF6B Antigen Affinity-purified Polyclonal Antibody (Catalog # AF142). The ND₅₀ is typically 0.1-0.5 µg/mL.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Human decoy receptor 3 (DcR3), also called TNFRSF6B, TR6, and M68, is a member of the TNF receptor superfamily. The cDNA of DcR3 encodes a 300 amino acid (aa) polypeptide with a putative 23 aa signal peptide. Like osteoprotegerin (OPG), DcR3 lacks a transmembrane sequence and is a secreted protein. DcR3 shares sequence identity with OPG (31%), TNF RII (29%), and Fas (17%). It was found to be expressed in a variety of different tissues and at high levels in many malignant tumors. Among TNF family members, DcR3 was shown to bind with Fas ligand (FasL) and LIGHT and inhibit FasL- and LIGHT-induced apoptosis. Thus, in addition to DcR1, DcR2, and OPG, DcR3 is another TNFR family molecule which modulates ligands that induce apoptosis. Over-expression of DcR3 might be a mechanism by which certain tumors escape immune-cytotoxic attack.

References:

1. Pitti, R.M. *et al.* (1998) *Nature* **396**:699.
2. Yu, K-Y. *et al.* (1999) *J. Biochem. Chem.* **274**:13733.
3. Bai, C. *et al.* (2000) *Proc. Natl. Acad. Sci. USA* **97**:1230.