

**DESCRIPTION**

<b>Source</b>	Mouse myeloma cell line, NS0-derived human TRAIL R2/TNFRSF10B protein			
	TRAIL R2 (Ala54-Glu182) Accession # Q6FH58	IEGRMD	Human IgG <sub>1</sub> (Pro100-Lys330)	6-His tag
	N-terminus		C-terminus	
<b>N-terminal Sequence</b>	Ala54			
<b>Analysis</b>				
<b>Structure / Form</b>	Disulfide-linked homodimer			
<b>Predicted Molecular Mass</b>	42 kDa (monomer)			

**SPECIFICATIONS**

<b>SDS-PAGE</b>	44-50 kDa, reducing conditions
<b>Activity</b>	Measured by its ability to inhibit TRAIL-mediated cytotoxicity using L-929 mouse fibroblast cells treated with TRAIL. The ED <sub>50</sub> for this effect is 0.7-2 ng/mL in the presence of 20 ng/mL of recombinant human (rh) TRAIL or 6 ng/mL cross-linked rhTRAIL (Catalog # 375-TL and MAB050).
<b>Endotoxin Level</b>	<0.01 EU per 1 µg of the protein by the LAL method.
<b>Purity</b>	>95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Reconstitute at 100 µg/mL in sterile PBS containing at least 0.1% human or bovine serum albumin.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<p><b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b></p> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 3 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**BACKGROUND**

Human TRAIL R2, also called DR5 and TRICK 2 is a type 1, TNF R family, membrane protein which is a receptor for TRAIL (APO2 ligand). In the new TNF superfamily nomenclature, TRAIL R2 is referred to as TNFRSF10B. TRAIL R2 cDNA encodes a 440 amino acid residue precursor protein containing extracellular cysteine-rich domains, a transmembrane domain and a cytoplasmic death domain. Among TNF receptor family proteins, TRAIL R2 is most closely related to TRAIL R1/DR4, sharing 55% amino acid sequence identity. Binding of trimeric TRAIL to TRAIL R2 induces apoptosis. The induction of apoptosis likely requires oligomerization of the receptor. The human TRAIL R2/Fc chimera neutralizes the ability of TRAIL to induce apoptosis. Besides TRAIL R2, an additional TRAIL R1/DR4, which transduces apoptosis signaling, and two TRAIL decoy receptors, which antagonize TRAIL-induced apoptosis, have been reported.

**References:**

1. Chaudhary, P.M. *et al.* (1997) *Immunity* 7:821.
2. Walczak, H. *et al.* (1997) *EMBO J.* 16:5386.
3. Golstein, P. (1997) *Curr. Biol.* 7:R750.