

DESCRIPTION

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

SPECIFICATIONS

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

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 100 µg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <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. • 3 months, -20 to -70 °C under sterile conditions after reconstitution.

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.