

DESCRIPTION

Source	Chinese Hamster Ovary cell line, CHO-derived human TRAIL R2/TNFRSF10B protein		
	Human TRAIL R2/TNFRSF10B (Ala54-Ser210) Accession # AAH01281.1	IEGRMD	Human IgG ₁ (Pro100-Lys330)
	N-terminus		C-terminus
N-terminal Sequence	Ala54		
Analysis			
Structure / Form	Disulfide-linked homodimer		
Predicted Molecular Mass	44 kDa		

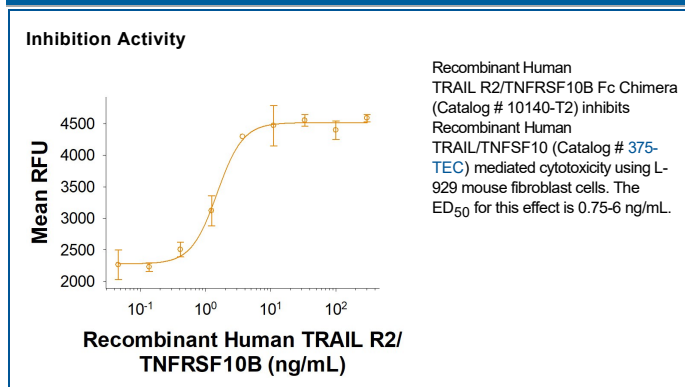
SPECIFICATIONS

SDS-PAGE	54-61 kDa, under 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 0.75-6 ng/mL.
Endotoxin Level	<0.10 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 with Trehalose. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 500 µg/mL in 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.

DATA



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) (1). 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. There are no known rat or mouse homologs to TRAILR2. Binding of trimeric TRAIL to TRAIL R2 induces apoptosis (1-2). The induction of apoptosis likely requires oligomerization of the receptor. The human TRAIL R2/Fc chimera neutralizes the ability of TRAIL to induce apoptosis (1-2). 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 (3).

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.