

For Research Use Only

# TRAIL Recombinant antibody, PBS Only (Detector)

Catalog Number: 84280-1-PBS



## Basic Information

Catalog Number:	84280-1-PBS	GenBank Accession Number:	BC032722	Purification Method:	Protein A purification
Concentration:	1 mg/ml	GeneID (NCBI):	8743	CloneNo.:	241419C12
Source:	Rabbit	UNIPROT ID:	P50591		
Isotype:	IgG	Full Name:	tumor necrosis factor (ligand) superfamily, member 10		
		Calculated MW:	281 aa, 33 kDa		
		Observed MW:	22-25 kDa		

## Applications

**Tested Applications:**  
WB, Cytometric bead array, Sandwich ELISA, Indirect ELISA, Sample test

**Species Specificity:**  
human

## Background Information

TRAIL, also known as CD253 or TNFSF10 (tumor necrosis factor superfamily member 10), is a typical death ligand expressed on natural killer cells and cytotoxic T lymphocytes. This protein preferentially induces apoptosis in transformed and tumor cells, but does not appear to kill normal cells although it is expressed at a significant level in most normal tissues. TRAIL induces apoptotic cell death in cancer by binding to its functional death receptors, death receptor (DR) 4 (TNFRSF10A/TRAIL-R1) and DR5 (TNFRSF10B/TRAIL-R2) to activate the extrinsic apoptosis pathway. TRAIL also activates c-Jun N-terminal kinase (MAPK8/JNK) and the transcription factor nuclear factor- $\kappa$ B (NF $\kappa$ B). The binding of this protein to its receptors has been shown to trigger the activation of MAPK8/JNK, caspase 8, and caspase 3.

## Storage

**Storage:**  
Store at -80°C.  
**The product is shipped with ice packs. Upon receipt, store it immediately at -80°C**

**Storage Buffer:**  
PBS only, pH7.3

For technical support and original validation data for this product please contact:

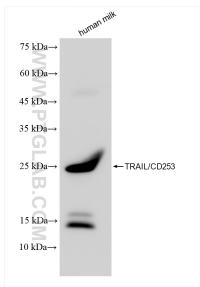
T: 4006900926

E: Proteintech-CN@ptglab.com

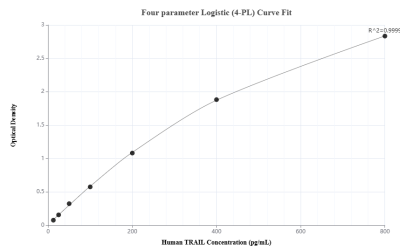
W: ptgcn.com

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

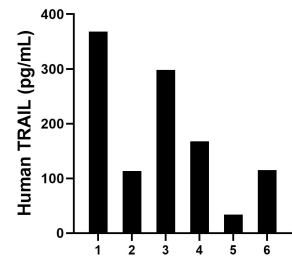
Selected Validation Data



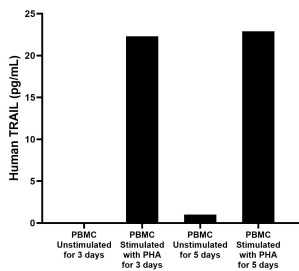
Human milk samples were subjected to SDS PAGE followed by western blot with 84280-1-RR (TRAIL antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84280-1-PBS in a different storage buffer formulation.



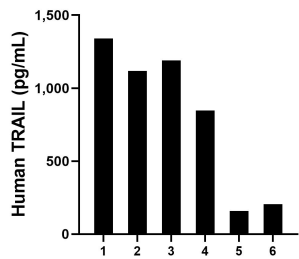
Sandwich ELISA standard curve of MP01166-1, Human TRAIL Recombinant Matched Antibody Pair - PBS only. 84280-2-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard RP02339. 84280-1-PBS was HRP conjugated as the detection antibody. Range: 12.5-800 pg/mL



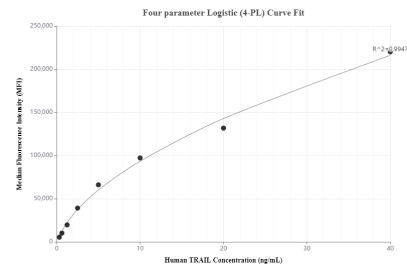
Serum of six individual healthy human donors was measured. The human TRAIL concentration of detected samples was determined to be 182.8 pg/mL with a range of 33.7 - 368.3 pg/mL



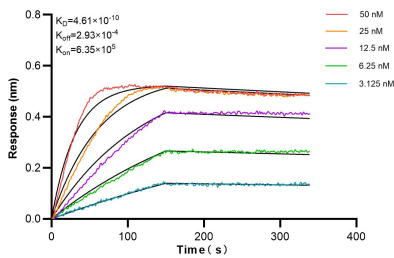
Human peripheral blood mononuclear cells (PBMC) were cultured unstimulated or stimulated with 10  $\mu$ g/mL PHA for 3 days or 5 days. For the PBMC supernatant cultured for 3 days, the mean TRAIL concentration was undetectable in unstimulated PBMC supernatant, 22.3 pg/mL in PHA stimulated PBMC supernatant. For the PBMC supernatant cultured for 5 days, the mean TRAIL concentration was determined to be 1.0 pg/mL in unstimulated PBMC supernatant, 22.9



Saliva of six individual healthy human donors was measured. The human TRAIL concentration of detected samples was determined to be 809.9 pg/mL with a range of 159.6 - 1,340.0 pg/mL



Cytometric bead array standard curve of MP01166-1, TRAIL Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 84280-2-PBS. Detection antibody: 84280-1-PBS. Standard: RP02339. Range: 0.313-40 ng/mL



Biolayer interferometry (BLI) kinetic assays of 84280-1-RR against Human TRAIL were performed. The affinity constant is 0.461 nM.