

# Recombinant Human Tumor Necrosis Factor-beta/TNFSF1

## (Human TNF-β/TNFSF1)

### Product Information

Product Name	Cat#	Size
	90603ES10	10 µg
Recombinant Human Tumor Necrosis Factor-beta/TNFSF1 (Human TNF-β/TNFSF1)	90603ES60	100 µg
	90603ES78	500 µg

### Product Description

TNF-β is a potent mediator of inflammatory and immune responses. It belongs to the TNF family of ligands, and signals through TNFR1 and TNFR2. TNF-β is produced by activated T and B lymphocytes, and has similar activities to TNF-α. Like TNF-α, TNF-β is involved in the regulation of various biological processes, including cell proliferation, differentiation, apoptosis, lipid metabolism, coagulation, and neurotransmission. TNF-β forms heterotrimers with lymphotoxin-beta, which anchors TNF-β to the cell surface. TNF-β mediates the inflammatory, immunostimulatory, and antiviral response, involves in the formation of second lymphoid organs during development, has a role in apoptosis. TNF-β is produced by lymphocytes and cytotoxic for a variety of tumor cells in vitro.

### Product Properties

<b>Synonyms</b>	TNFB, TNFSF1
<b>Accession</b>	P01374
<b>GeneID</b>	4049
<b>Source</b>	E.coli-derived Human Tumor Necrosis Factor-beta protein, Leu35-Leu205.
<b>Molecular Weight</b>	Approximately 18.7 kDa
<b>AA Sequence</b>	LPGVGLTPSA AQTARQHPKM HLAHSTLKPA AHLIGDPSKQ NSLLWRANTD RAFLQDGFSL SNNLLVPTS GIYFVYSQVV FSGKAYSPKA TSSPLYLAHE VQLFSSQYPF HVPLLSSQKM VYPGLQEPWL HSMYHGAAAFQ LTQGDQLSTH TDGIPHLVLS PSTVFFGAFA L
<b>Tag</b>	None
<b>Physical Appearance</b>	Sterile Filtered White lyophilized (freeze-dried) powder.
<b>Purity</b>	> 96% by SDS-PAGE and HPLC analyses.
<b>Biological Activity</b>	The ED <sub>50</sub> as determined by a cytotoxicity assay using murine L929 cells is less than 5 pg/ml, corresponding to a specific activity of > 2.0 × 10 <sup>8</sup> IU/mg in the presence of actinomycin D. Fully biologically active when compared to standard.
<b>Endotoxin</b>	< 0.1 EU per 1µg of the protein by the LAL method.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH7.4, with 0.02% Tween-20. We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom.
<b>Reconstitution</b>	Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20°C. Further dilutions should be made in appropriate buffered solutions.

### Shipping and Storage

The products are shipped with ice pack and can be stored at -20°C to -80°C for 1 year.

Recommend to aliquot the protein into smaller quantities when first used and avoid repeated freeze-thaw cycles.

### **Cautions**

1. Avoid repeated freeze-thaw cycles.
2. For your safety and health, please wear lab coats and disposable gloves for operation.
3. For research use only.