

Recombinant Human TNF beta (Tumor Necrosis Factor beta)

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 is secreted as a soluble polypeptide, but can form heterotrimers with lymphotoxin- β , which effectively anchors the TNF- β to the cell surface. TNF- β is cytotoxic to a wide range of tumor cells. Recombinant Human TNF- β is a secreted 172 amino acid protein (18.6 kDa) which forms an active non-disulfide-linked homotrimer structure in solution.

Typical Specifications

Species	Human
Expression	E. coli Cell Expressed
Activity	Typically ≤ 0.05 ng/ml ED50
Purity	$\geq 98\%$
Endotoxin	< 1.0 EU/ μ g
Molecular Mass	18.6 kDa
Country of Origin	USA

Purity Confirmation

This was determined by SDS-PAGE gel and HPLC analysis.

Activity Assay

The ED50 was determined by the cytolysis of murine L929 cells in the presence of Actinomycin D.

AA Sequence

MLPGVGLTPS	AAQTARQHPK	MHLAHSTLKP
AAHLIGDPSK	QNSLLWRANT	DRAFLQDGFS
LSNNSLLVPT	SGIYFVYSQV	MVYPGLQEPW
LHSMYHGAAF	QLTQGDQLST	HTDGIPHLVL
SPSTVFFGAF	AL	

Reconstitution Buffer

Centrifuge the vial prior to opening.

Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex.

Storage

This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% HSA) and store in working aliquots at -20°C to -80°C.

Limited Use and Restrictions

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