TNF-beta (E.coli-derived) Human E. coli

Product Data Sheet

Type: Recombinant
Source: E. coli
Species: Human
Other names: Tumor Necrosis Factor-?, TNFSF1, Lymphotoxin-alpha (LT-?)

Cat. No.:

RBG10326005	(5 µg)
RBG10326020	(20 µg)
RBG10326100	(100 µg)

Description

TNF-beta is a potent mediator of inflammatory and immune responses. It belongs to the TNF family of ligands, and signals through TNFR1 and TNFR2. TNF-beta is produced by activated T and B lymphocytes, and has similar activities to TNF-alpha. Like TNF-alpha, TNF-beta is involved in the regulation of various biological processes, including cell proliferation, differentiation, apoptosis, lipid metabolism, coagulation, and neurotransmission. TNF-beta is secreted as a soluble polypeptide, but can form heterotrimers with lymphotoxin-beta, which effectively anchors the TNF-beta to the cell surface. TNF-beta is cytotoxic to a wide range of tumor cells. Recombinant Human TNF-beta is a secreted 172 amino acid protein (18.6 kDa) which forms an active non-disulfide-linked homotrimer structure in solution.

Research topic

Apoptosis, Cardiovascular disease, Coronary artery disease, Immune Response, Infection and Inflammation, Lipoprotein metabolism, Neural tissue markers

Amino Acid Sequence

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MLPGVGLTPS AAQTARQHPK MHLAHSTLKP AAHLIGDPSK QNSLLWRANT DRAFLQDGFS LSNNSLLVPT SGIYFVYSQV
VFSGKAYSPK ATSSPLYLAH EVQLFSSQYP FHVPLLSSQK MVYPGLQEPW LHSMYHGAAF QLTQGDQLST HTDGIPHLVL
SPSTVFFGAF AL
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Source

E. coli

Purity

98%

Biological Activity

The ED_{50} as determined by the cytolysis of murine L929 cells in the presence of Actinomycin-D is ? 0.05 ng/ml, corresponding to a specific activity of ? 2×10^7 units/mg.

Endotoxin

Endotoxin level is <0.1 ng/µg of protein (<1EU/µg).

Reconstitution

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. 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% BSA) and store in working aliquots at -20°C to -80°C.

Storage, Stability/Shelf Life

-20°C

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