Data sheet

TNF β
Tumor Necrosis Factor β
human, recombinant, E. coli

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Amount</th>
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<tr>
<td>PR-685</td>
<td>20 µg</td>
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For in vitro use only
Quality guaranteed for 12 months
Store at -20°C

Avoid freeze / thaw cycles

Form
Lyophilized.

Solubility
It is recommended to reconstitute the lyophilized TNF-β in sterile bidest H₂O not less than 100 µg/ml. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Activity
ED₅₀: < 0.05 ng/ml, determined by the cytolysis of murine L929 cells in the presence of Actinomycin D corresponding to a Specific Activity of 2 x 10⁷ IU/mg.

Molecular Weight
18.6 kDa

Purity
≥ 95% by SDS-PAGE

Description
As well as regulating cell proliferation and apoptosis, the TNF-TNF Receptor system also plays an important role in the control of lymphoid organogenesis. Furthermore, TNF-α and TNF-β induce MHC class I and class II antigens as well as chemokines, and play a critical role in cell-cell interactions and lymphocyte trafficking. TNFs are also known to be involved in the defense against pathogens and in the induction of inflammatory and autoimmune diseases. TNF-β enhances cytotoxic responses against normal and transformed cell types. TNF would therefore appear to be essential in the regulation and maintenance of immune system homeostasis under normal and pathological conditions.

Recombinant human TNF-β (lymphotoxin) produced in E. coli is a single, non-glycosylated, polypeptide chain containing 171 amino acids and having a molecular mass of 18.6 kDa.

Recombinant human Tumor Necrosis Factor-β is purified by standard chromatographic techniques.

Amino acid sequence
MLPGVGLTPS AAQTARQHPK MHLAHSTLKPAAHLGDPKQQNSLWRANTDRAFLQDGFSLSNNLSLVPTSGIYFVYSQVFSGKAYSPKATSSPLYLAhevQLFSSQYPFHHVPLSSQKMVYPGLEPWLVHSMYHGAADFQLTQGDQLSTHTDGIPHLVLSSTVFFGAFA

Selected References: