



Overview

Synonyms	Bovine TNF-±
Description	Tumor Necrosis Factor-Alpha (TNF-±) plays a major role in regulating growth, differentiation, inflammation, viral replication, tumorigenesis, and autoimmune diseases. TNF alpha-1a is a potent lymphoid factor that exerts cytotoxic effects on a wide range of tumor cells. In addition to inducing hemorrhagic necrosis of tumors, studies indicate TNF is involved in tumor igenesis, tumor metastasis, viral replication, septic shock, fever, inflammation, Crohn's disease, rheumatoid arthritis and graft-versus-host disease. Recombinant Bovine Tumor Necrosis Factor-alpha (rbTNF-±) produced in <i>E. coli</i> cells is a single non-glycosylated polypeptide chain containing 80 amino acids. A fully biologically active molecule, rbTNF-± has a molecular mass of 17.6 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques.
Accession No	Q06599
Source	E. coli
Biological Activity	$ED_{50} < 0.1 \ \mu g/ml$, measured in a cytotoxicity assay using mouse L-929 cells in the presence of actinomycin D, corresponding to a specific activity of > 1 x 10 ⁴ units/mg.
Sequence	MLRSSSQASS NKPVAHVVAD INSPGQLRWW DSYANALMAN GVKLEDNQLV VPADGLYLIY SQVLFRGQGC PSTPLFLTHT ISRIAVSYQT KVNILSAIKS PCHRETPEWA EAKPWYEPIY QGGVFQLEKG DRLSAEINLP DYLDYAESGQ VYFGIIAL

Properties

Measured Molecula Weight	^r 17.6 kDa, observed by reducing SDS-PAGE
Purity	> 95% as analyzed by SDS-PAGE & HPLC
Formulation	Lyophilized after extensive dialysis against PBS.
Reconstitution	Reconstituted in ddH₂O or PBS at 100 μg/ml.
Endotoxin Level	< 0.2 EU/µg, determined by LAL method.
Storage	Lyophilized recombinant Bovine TNF-± remains stable up to 6 months at lower than - 70°C from date of receipt. Upon reconstitution, Bovine TNF-± should be stable up to 1 week at 4°C or up to 3 months at -20°C.
Note	For research use only

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