

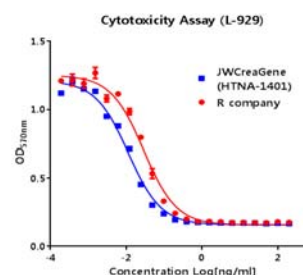
DATA SHEET

Product Information

Product Name	: Recombinant Human Tumor Necrosis Factor-alpha (rhTNF-α)
Synonyms	: Cachectin, TNF-alpha, TNF-a, tumor necrosis factor, TNF
Description	: TNF is adipokine involved in systemic inflammation and is a member of a group of cytokines that stimulate the acute phase reaction. It is produced chiefly by activated macrophages, although it can be produced by many other cell types such as CD4+ lymphocytes, NK cells, neutrophils, mast cells, eosinophils, and neurons. TNF, being an endogenous pyrogen, is able to induce fever, apoptotic cell death, cachexia, inflammation and to inhibit tumorigenesis and viral replication and respond to sepsis via IL1 & IL6 producing cells. Dysregulation of TNF production has been implicated in a variety of human diseases including Alzheimer's disease, cancer, major depression and inflammatory bowel disease. (Ref. From Wikipedia)
NCBI Accession No.	NM_000594.3
Amino acid sequence	: MVRSSSRTPSDKPKVAHVVANPQAEGLQWLNRRANALLANGVELRDNLVVP SEGLYLIYSQVLFKGGQCPSTHVLLTHTISRIVASYQTKVNLLSAIKSPCQR ETPEGAEAKPWYEPITYLGGVVFQLEKGDRLSAEINRPDYLDFAESGQVYFGI IAL
Molecular Mass	: 17.45 kDa (158 aa)
Protein Tags	: No tagging
Source	: <i>E. coli</i> .
Cat. No.	: HTNA-10, HTNA-25, HTNA-50, HTNA-100, HTNA-250, HTNA-500
Storage	: Should be at ≤ -70 °C as undiluted aliquots of handy size. Avoid repeated freezing and thawing.
Cross Reactivity	: Cow, Monkey, Mouse, Rat, Sheep

Quality Control

Test items	Specifications
Appearance	: Clear, colorless liquid
Purity	: Greater than 98 % by RP-HPLC and SDS-PAGE
Specificity	: Using Western blot, detection
Concentration	: 0.1 mg/ml, Bradford method Determined by proliferation of L-929 indicator cells
Biological Activity	: The ED50 is <0.05 ng/ml, corresponding to a specific activity of $> 2.0 \times 10^7$ EU/mg
Endotoxin	: Less than 1.0 EU/ μ g as determined by the LAL method
Formulation	: 30mM Tris-HCl (pH 7.0~8.0) without preservative or carrier proteins.
Stability	: Stable for up to 12 months at -70 °C. Stable for a month at 4 °C.
Sterility	: Sterilized through a 0.2 μ m membrane filter and packaged aseptically. Culture for 2 weeks, no growth



Manufacturer : **JW CreaGene Inc.**
 FL2, Jungang induspia V, 138-6, Sangdaewon-dong, Jungwon-gu, Seongnam-si,
 Gyeonggi-do, South Korea (462-120)
 Tel: 82-31-737-3310, Fax: 82-31-737-3301