

Recombinant Rhesus Macaque Tumor Necrosis Factor-alpha/TNFSF2

Information

Gene ID	715467
Accession #	P48094
Alternate Names	TNFSF2, Cachectin, Differentiation-inducing Factor, DIF, Necrosin, Cytotoxin
Source	Escherichia coli.
M.Wt	Approximately 17.3 kDa, a single non-glycosylated polypeptide chain containing 157 amino acids.
AA Sequence	VRSSSRTPSD KPAHVVANP QAEGQLQWLN RRANALLANG VELTDNQLVV PSEGLYLIYS QVLFGQGQCP SNHVLLTHTI SRIAVSYQTK VNLLSAIKSP CQRETPEGAE AKPWYEPIYL GGVFQLEKGD RLAEINLPD YLDFAESGQV YFGIIAL
Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles - 12 months from date of receipt, -20 to -70 °C as supplied - 1 month, 2 to 8 °C under sterile conditions after reconstitution - 3 months, -20 to -70 °C under sterile conditions after reconstitution
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4, 5 % trehalose.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.
Biological Activity	Fully biologically active when compared to standard. The ED as determined by a cytotoxicity assay using murine L929 cells is less than 0.05 ng/ml, corresponding to a specific activity of > 2.0 × 10 IU/mg in the presence of actinomycin D.
Shipping Condition	Gel pack.
Handling	Centrifuge the vial prior to opening.
Usage	For Research Use Only! Not to be used in humans.

Components and Storage

Components	5µg	100µg	500µg
Recombinant Rhesus Macaque Tumor Necrosis Factor-alpha/TNFSF2	5µg	100µg	500µg

Use a manual defrost freezer and avoid repeated freeze-thaw cycles

- 12 months from date of receipt, -20 to -70 °C as supplied
- 1 month, 2 to 8 °C under sterile conditions after reconstitution
- 3 months, -20 to -70 °C under sterile conditions after reconstitution

Quality Control

Purity	> 95 % by SDS-PAGE and HPLC analyses.
Endotoxin	Less than 1 EU/ μ g of rRhTNF- α as determined by LAL method.

Description

Tumor necrosis factor alpha (TNF- α), also called cachectin, is the best-known member of the TNF-family, which can cause cell death. This protein is produced by neutrophils, activated lymphocytes, macrophages, NK cells, LAK cells, astrocytes endothelial cells, smooth muscle cells and some transformed cells. TNF- α occurs as a secreted, soluble form and as a membrane-anchored form, both of which are biologically active. The naturally-occurring form of TNF- α is glycosylated, but non-glycosylated recombinant TNF- α has comparable biological activity. The biologically active native form of TNF- α is reportedly a trimer. Rhesus macaque and human TNF- α show approximately 98 % homology at the amino acid level. Two types of receptors for TNF- α have been described and virtually all cell types studied show the presence of one or both of these receptor types.

Reference

1. Davenport C, Kenny H, Ashley DT, et al. 2012. Eur J Clin Invest, 42: 1173-9
2. Cavalcanti YV, Brelaz MC, Neves JK, et al. 2012. Pulm Med, 2012: 745483
3. Sheng WS, Hu S, Ni HT, et al. 2005. J Leukoc Biol, 78: 1233-41
4. Berthold-Losleben MandHimmerich H. 2008. Curr Neuropharmacol, 6: 193-202.

APExBIO Technology

www.apexbt.com

7505 Fannin street, Suite 410, Houston, TX 77054.

Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: info@apexbt.com