Active Tumor Necrosis Factor Alpha (TNFa)

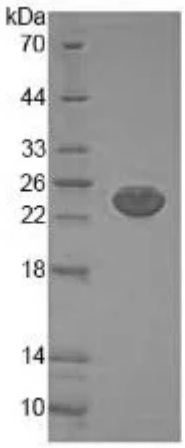
Catalog#:PHM12236

概述（Summary）

别称（Alternative Names）	DIF; TNF-A; TNFSF2; Cachectin; Tumor Necrosis Factor Ligand Superfamily Member 2
纯度（Purity）	Greater than 95% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Gly57-Leu235】
Accession #	P06804
表达宿主（Host）	293F
种属（Species）	Mus musculus (Mouse)
预测分子量（Predicted MW）	21.4 kDa
制剂（Form）	Lyophilized from a 0.2 μm filtered solution of 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
运输方式（Shipping）	The product is shipped with ice bag. Upon receipt, store it immediately at the temperature listed below.
稳定性&储存（Stability &Storage）	12 months at -20°C to -80°C in lyophilized state.6 months at -20°C to -80°C under sterile conditions after reconstitution.7-10 days at 2°C to 8°C under sterile conditions after reconstitution.Please minimize freeze-thaw cycles.
复溶（Reconstitution）	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
背景介绍（References）	Cytokine that binds to TNFRSF1A/TNFR1 and TNFRSF1B/TNFBR. It is mainly secreted by macrophages and can induce cell death of certain tumor cell lines. It is potent pyrogen causing fever by direct action or by stimulation of interleukin-1 secretion and is implicated in the induction of cachexia, Under certain conditions it can stimulate cell proliferation and induce cell differentiation. Induces insulin resistance in adipocytes via inhibition of insulin-induced IRS1 tyrosine phosphorylation and insulin-induced glucose uptake. Induces GKAP42 protein degradation in adipocytes which is partially responsible for TNF-induced insulin

resistance. Plays a role in angiogenesis by inducing VEGF production synergistically with IL1B and IL6.; The TNF intracellular domain (ICD) form induces IL12 production in dendritic cells.

电泳图（SDS-PAGE image）



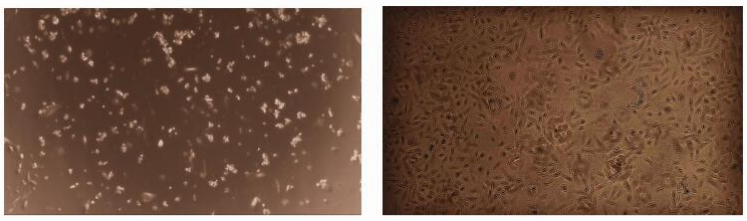
Greater than 95% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）

Table 1. Effect of TNF-β on A549 cells by ELISA.

Sample (cell supernatant of A549 cells)	Concentration of IL-1β (ng/mL)
Stimulated with TNF-β (10ng/mL)	52.0
Unstimulated	4.9

TNF-a, being an endogenous pyrogen, is able to induce fever, necrosis, inflammation and to inhibit tumorigenesis. As reported, TNF-a could inhibit the proliferation and induce necrosis of A549 cells, and the concentration of IL-1β in cell supernatant will increase after stimulation. Therefore, A549 cells were incubated in DMEM with TNFa (1ng/mL, 10ng/mL) for 2h, 4h, 8h, 24h, 48h, then cells were observed by inverted microscope and IL-1β was detected in the cell supernatant by ELISA .
Cell necrosis after incubation with TNF-a (10ng/mL) for 72h was shown in Figure 1. The production of IL-1β after incubation with TNF-a (10ng/mL) for 8h is shown in Table 1.



A B

Figure 1. Effect of TNF-a on A549 cells.

(A) A549 cells cultured in DMEM, stimulated with 10ng/mL TNF-a for 72h;

(B) Unstimulated A549 cells cultured in DMEM for 72h.

注意事项（Note）

For Research Use Only , Not for Diagnostic Use.