Active Tumor Necrosis Factor Alpha (TNFa)

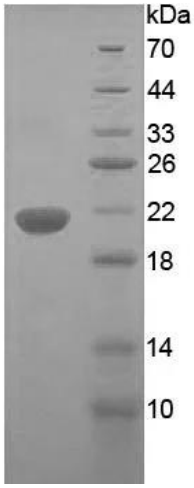
Catalog#:PEM12235

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）	【Leu80-Leu235】
Accession #	P06804
表达宿主（Host）	E.coli
种属（Species）	Mus musculus (Mouse)
预测分子量（Predicted MW）	20.5 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）

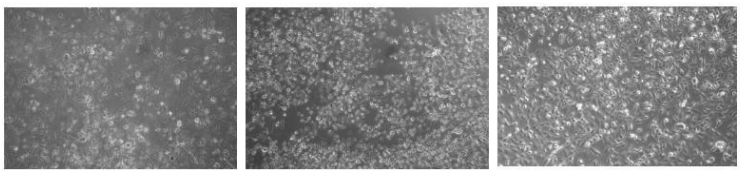


Greater than 95% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）

Sample (cell supernatant of A549 cells)	Concentration of IL-1β (ng/mL)
Stimulated with TNFα (1ng/mL)	9.304
Stimulated with TNFα (10ng/mL)	29.064
Unstimulated	1.344

Figure 1. Cell apoptosis of A549 cells after stimulated by TNFa.
TNFa, being an endogenous pyrogen, is able to induce fever, apoptotic cell death, inflammation and inhibit tumorigenesis. As reported, TNFa could inhibit the proliferation and induce apoptosis of A549 cells, and the concentration of IL-1β in cell supernatant will increase after stimulation. 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 in cell supernatant was detected by ELISA. Cell apoptosis of A549 after incubation of 48h was shown in Figure 1.
(A)A549 cells cultured in DMEM, stimulated with 1ng/mL TNFa for 48h;
(B)A549 cells cultured in DMEM, stimulated with 10ng/mL TNFa for 48h;
(C)A549 cells cultured in DMEM for 48h. Table 1. ELISA detection of IL-1β expression from A549 cells by TNFa. Effect of TNFa on the expression of IL-1β is shown in Table 1.



注意事项（Note）

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