

Recombinant Human TNF-alpha/TNFA Protein

Catalog Number: PKSH033490

Note: Centrifuge before opening to ensure complete recovery of vial contents.

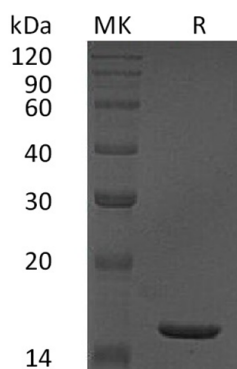
Description

Species	Human
Source	E.coli-derived Human TNF-alpha/TNFA protein Val77-Leu233
Calculated MW	17.5 kDa
Observed MW	16 kDa
Accession	P01375
Bio-activity	Measured in a cytotoxicity assay using L- 929 mouse fibroblast cells in the presence of the metabolic inhibitor actinomycin D. The ED ₅₀ for this effect is 10-50 pg/ml.

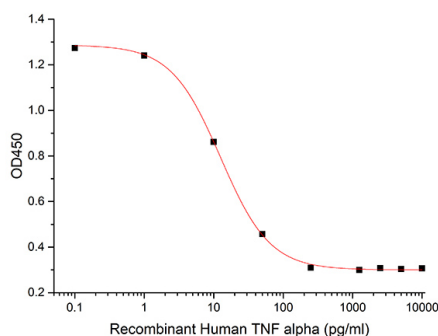
Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 0.01 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 µm filtered solution of 20mM PB, 6% Sucrose, 4% Mannitol, 0.05% Tween 80, pH 6.0. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



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Background

TNF α is a homotrimer with a subunit molecular mass of 17 kD cytokine that binds to TNFRSF1A/TNFR1 and TNFRSF1B/TNFR2. It is mainly secreted by macrophages and can induce cell death of certain tumor cell lines. It plays a major role in growth regulation; differentiation; inflammation; viral replication; tumorigenesis; autoimmune diseases and in viral; bacterial; fungal; and parasitic infections. Besides inducing hemorrhagic necrosis of tumors; TNF was found to be involved in tumorigenesis; tumor metastasis; viral replication; septic shock; fever; inflammation; and autoimmune diseases including Crohn's disease; and rheumatoid arthritis as well as graft-versus-host disease.