

Product Datasheet

Recombinant Human TNF α (orb1921834)

Catalog Number orb1921834

Category Proteins

Description Tumor necrosis factor (TNF, previously referred to as TNF- α) is a pleiotropic cytokine involved in the pathogenesis of a range of physiological processes that control inflammation, anti-tumor responses, and immune system homeostasis. TNF- α are mainly produced and secreted by immune cells, but they are also secreted by IVD cells. TNF- α is primarily produced as transmembrane TNF- α (tmTNF- α), a type II transmembrane protein arranged in stable homotrimers. Then, the metalloprotease TNF- α -converting enzyme (TACE) cleaves tmTNF- α into sTNF- α (a soluble form). TmTNF- α and sTNF- α are both biologically active. TNF- α elicits its effects via two distinct receptors: TNFR1 and TNFR2. TNFR1 can be activated either by tmTNF- α or sTNF- α , while TNFR2 is activated mainly by sTNF- α . TNFR1 appears to be the core mediator in TNF- α signal transduction due to its constitutive expression in most cell types. TNF- α activates TNFR1 and forms two different TNF signal complexes: complex I has an anti-apoptotic effect, while complex II induces apoptosis. Conversely, TNFR2 mainly exists in immune cells and can be highly regulated, revealing it to be capable of regulating immune function. TNFR2 activation is considered anti-apoptotic due to the absence of an intracellular death domain. The TNFR1 and TNFR2 extracellular domains can be cleaved and released from the surface of the cell into soluble forms, neutralizing the role of TNF- α .

Form/Appearance Lyophilized Powder

Purity $\geq 95\%$

UniProt ID **P01375**

MW 17.18 kDa

Application notes Application Notes: For research use only. Minimum Sample Size: 50 μ g/vial

Expression System Eukaryotic cell

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Endotoxins	≤10 EU/mg
Source	CHO Cell
Biological Origin	Human
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. 6 months, -20 to -89°C under sterile conditions after reconstitution.
Note	For research use only
Entrez	7124
Expiration Date	6 months from date of receipt.

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