

ARG80241 Rat TNF alpha ELISA Kit

Package: 96 wells
Store at: 4°C

Component

Cat. No.	Component Name	Package	Temp
ARG80241-001	Antibody-coated microplate	8 X 12 strips	4°C. Unused strips should be sealed tightly in the air-tight pouch.
ARG80241-002	Standard (Lyophilized)	3 X 3.2 ng/vial	4°C
ARG80241-003	Standard diluent buffer	20 ml	4°C
ARG80241-004	Antibody conjugate concentrate	400 µl	4°C
ARG80241-005	Antibody diluent buffer	16 ml	4°C
ARG80241-006	HRP-Streptavidin concentrate	400 µl	4°C (Protect from light)
ARG80241-007	HRP-Streptavidin diluent buffer	16 ml	4°C
ARG80241-008	20X Wash buffer	50 ml	4°C
ARG80241-009	TMB substrate	12 ml	4°C (Protect from light)
ARG80241-010	STOP solution	12 ml	4°C
ARG80241-011	Plate sealer	4 strips	Room temperature

Summary

Product Description	ARG80241 Rat TNF alpha ELISA Kit is an Enzyme Immunoassay kit for the quantification of Rat TNF alpha in Serum, Plasma, Cell culture supernatants.
Tested Reactivity	Rat
Tested Application	ELISA
Specificity	No significant cross-reactivity or interference with Human TNF- alpha, TNF- beta or porcine TNF- alpha
Target Name	TNF alpha
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm
Sensitivity	30 pg/ml
Sample Type	Serum, Plasma, Cell culture supernatants
Standard Range	62.5 - 4000 pg/ml
Sample Volume	100 µl

Precision	CV: less than10%
Alternate Names	Tumor necrosis factor ligand superfamily member 2; DIF; Cachectin; ICD2; ICD1; N-terminal fragment; TNF-a; TNFA; TNFSF2; TNF-alpha; Tumor necrosis factor; NTF

Application Instructions

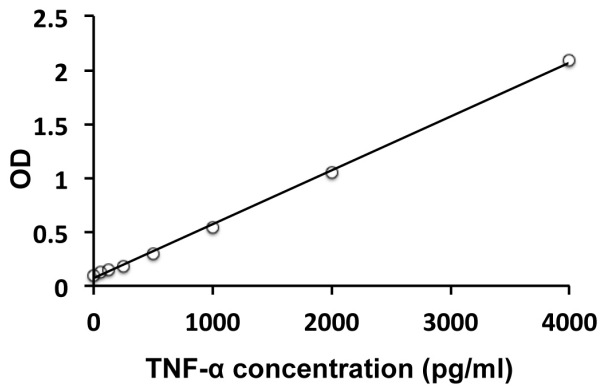
Assay Time	4 hours
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Properties

Form	96 well
Storage instruction	Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 24835 Rat Swiss-port # P16599 Rat
Gene Symbol	LOC103694380
Gene Full Name	tumor necrosis factor
Background	<p>Tumor Necrosis Factor Alpha (TNF alpha) is a protein secreted by lipopolysaccharide stimulated macrophages, and causes tumor necrosis when injected into tumor bearing mice. TNF alpha is believed to mediate pathogenic shock and tissue injury associated with endotoxemia. TNF alpha exists as a multimer of two, three, or five noncovalently linked units, but shows a single 17 kDa band following SDS PAGE under non reducing conditions. TNF alpha is closely related to the 25 kDa protein Tumor Necrosis Factor beta (lymphotoxin), sharing the same receptors and cellular actions. TNF alpha causes cytolysis or cytostasis of certain transformed cells, being synergistic with interferon gamma in its cytotoxicity. Although it has little effect on many cultured normal human cells, TNF alpha appears to be directly toxic to vascular endothelial cells. Other actions of TNF alpha include stimulating growth of human fibroblasts and other cell lines, activating polymorphonuclear neutrophils and osteoclasts, and induction of interleukin 1, prostaglandin E2 and collagenase production. TNF alpha is currently being evaluated in treatment of certain cancers and AIDS Related Complex.</p>
Highlight	<p>Related products: TNF alpha antibodies; TNF alpha ELISA Kits; TNF alpha Duos / Panels; TNF alpha recombinant proteins;</p> <p>Related news: HMGB1 in inflammation Inflammatory Cytokines</p> <p>New ELISA data calculation tool: Simplify the ELISA analysis by GainData</p>
Research Area	Cancer kit; Cell Biology and Cellular Response kit; Immune System kit; Metabolism kit; Signaling Transduction kit
PTM	<p>The soluble form derives from the membrane form by proteolytic processing. The membrane-bound form is further proteolytically processed by SPPL2A or SPPL2B through regulated intramembrane proteolysis producing TNF intracellular domains (ICD1 and ICD2) released in the cytosol and TNF C-domain 1 and C-domain 2 secreted into the extracellular space.</p> <p>The membrane form, but not the soluble form, is phosphorylated on serine residues. Dephosphorylation of the membrane form occurs by binding to soluble TNFRSF1A/TNFR1. O-glycosylated; glycans contain galactose, N-acetylgalactosamine and N-acetylneuraminic acid.</p>



ARG80241 Rat TNF alpha ELISA Kit standard curve image

ARG80241 Rat TNF alpha ELISA Kit results of a typical standard run with optical density reading at 450 nm.