

Datasheet for KOA0318**Rat TNF alpha ELISA Kit****Overview**

Description:	Rat TNF alpha AccuSignal ELISA Kit - KOA0318
Item No.:	KOA0318
Size:	1 Kit
Applications:	ELISA
Reactivity:	Rat
Range:	15.6 pg/ml - 1000 pg/ml (cell culture supernates), 7.8 pg/ml - 500 pg/ml (serum, plasma)

Product Details

Background:	Tumor necrosis factor-alpha(TNF-alpha, or TNF) is secreted by macrophages in response to inflammation, infection and cancer. Human Tumor Necrosis Factor(TNF) and Lymphotoxin(TNF-beta) are cytotoxic proteins which have similar biological activities and share 30% amino acid homology. TNF-alpha is produced by monocytes, which can stimulate endothelial cells to produce the multilineage growth factor granulocyte-macrophage colony-stimulating factor and extend the role of this immunoregulatory protein to the regulation of hematopoiesis in vitro. TNF is a soluble protein that causes damage to tumor cells but has no effect on normal cells. Human TNF has been purified to apparent homogeneity as a 17.3-kilodalton protein from HL-60 leukemia cells and has showed cytotoxic and cytostatic activities against various human tumor cell lines. The human TNF cDNA is 1585 base pairs in length and encodes a protein of 233 amino acids. The mature protein begins at residue 77, leaving a long leader sequence of 76 amino acids. TNF-a...
Synonyms:	APC1 protein, Cachectin, DIF, soluble form, Tnf, TNF a, TNF alpha, TNF macrophage derived, TNF monocyte derived, TNF superfamily member 2, TNF-a, TNF-alpha, TNFA_HUMAN, TNFSF2, Tumor necrosis factor, Tumor necrosis factor alpha, Tumor necrosis factor ligand superfamily member 2
Detection Kit Type:	ELISA Kit
Detection Range:	15.6 pg/ml - 1000 pg/ml (cell culture supernates), 7.8 pg/ml - 500 pg/ml (serum, plasma)
Sensitivity:	<1 pg/ml

Target Details**Gene Name:** TNF

Reactivity:	Rat
Immunogen:	Expression system for standard: CHO; Immunogen sequence: L80-L235
Purity/Specificity:	Natural and recombinant rat TNF alpha. There is no detectable cross-reactivity with other relevant proteins.
Relevant Links:	• UniProtKB - P16599 • NCBI - NP_036807.1 • GeneID - 24835 • KOA0318 Protocol

Application Details

Tested Applications:	ELISA
Application Note:	Useful in Sandwich ELISA for Quantitative Detection of Antigen. Aliquot 0.1ml per well of the 1000pg/ml, 500pg/ml, 250pg/ml, 125pg/ml, 62.5pg/ml, 31.2pg/ml, 15.6pg/ml rat TNF alpha standard solutions into the precoated 96-well plate. Add 0.1ml of the sample diluent buffer into the control well (Zero well). Add 0.1ml of each properly diluted sample of rat cell culture supernates, serum or plasma(heparin , EDTA) to each empty well. It is recommended that each rat TNF alpha standard solution and each sample be measured in duplicate.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
Other:	Sensitivity <1 pg/ml DOE @4°C 11/26/2025 @-20° 05/27/2026

Formulation

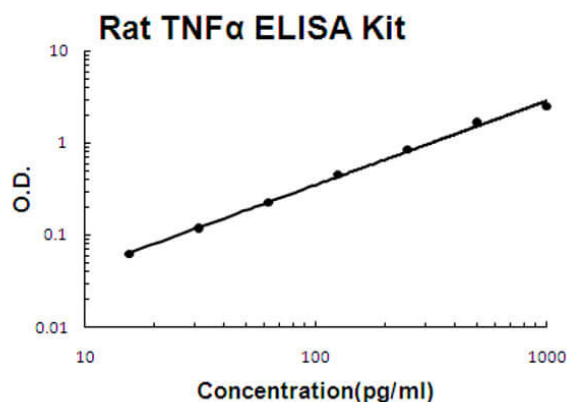
Concentration:	1 Kit
Anticoagulant:	Heparin Sodium

Shipping & Handling

Shipping Condition:	Wet Ice
Storage Condition:	Store vials at 4°C prior to opening. Centrifuge product if not completely clear after standing at room temperature. This product is stable for 6 months at 4°C as an undiluted liquid. Dilute only prior to immediate use. For extended storage freeze at -20°C or below for 12 months. Avoid cycles of freezing and thawing.

Expiration: See kit insert for complete instructions.

Images



ELISA

Rat TNF alpha AccuSignal ELISA Kit standard curve. Assay Range: 15.6pg/ml-1000pg/ml(cell culture supernates), 7.8pg/ml-500pg/ml(serum, plasma). Sensitivity: <1pg/ml.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.