

Product datasheet

Mouse TNF alpha ELISA Kit ab100747

★★★★★ 1 Abreviews 47 References 3 Images

Overview

Product name	Mouse TNF alpha ELISA Kit
Detection method	Colorimetric
Sample type	Cell culture supernatant, Plasma, serum free media
Assay type	Sandwich (quantitative)
Sensitivity	< 60 pg/ml
Range	93.75 pg/ml - 6000 pg/ml
Recovery	93 %

Sample specific recovery

Sample type	Average %	Range
Cell culture supernatant	92.46	84% - 104%
Plasma	93.82	83% - 102%

Assay duration Multiple steps standard assay

Species reactivity **Reacts with:** Mouse

Product overview Abcam's TNF alpha Mouse ELISA (Enzyme-Linked Immunosorbent Assay) kit is an *in vitro* enzyme-linked immunosorbent assay for the quantitative measurement of Mouse TNF alpha in plasma and cell culture supernatants.

This assay employs an antibody specific for Mouse TNF alpha coated on a 96-well plate. Standards and samples are pipetted into the wells and TNF alpha present in a sample is bound to the wells by the immobilized antibody. The wells are washed and biotinylated anti-Mouse TNF alpha antibody is added. After washing away unbound biotinylated antibody, HRP-conjugated streptavidin is pipetted to the wells. The wells are again washed, a TMB substrate solution is added to the wells and color develops in proportion to the amount of TNF alpha bound. The Stop Solution changes the color from blue to yellow, and the intensity of the color is measured at 450 nm.

Mouse TNFa levels are extremely low, and as such we expect "normal" levels to be undetectable when using our kit on plasma samples.

We have not been able to detect endogenous Mouse TNF alpha in normal serum with ab100747, only in serum spiked with Mouse TNF alpha.

Platform Microplate

Properties

Storage instructions Store at -20°C. Please refer to protocols.

Components	1 x 96 tests
20X Wash Buffer Concentrate	1 x 25ml
300X HRP-Streptavidin Concentrate	1 x 200µl
5X Assay Diluent B	1 x 15ml
Assay Diluent A	1 x 30ml
Biotinylated anti-Mouse TNF alpha (lyophilized)	2 vials
Recombinant Mouse TNF alpha Standard (lyophilized)	2 vials
Stop Solution	1 x 8ml
TMB One-Step Substrate Reagent	1 x 12ml
TNF alpha Microplate (12 x 8 wells)	1 unit

Function 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 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.

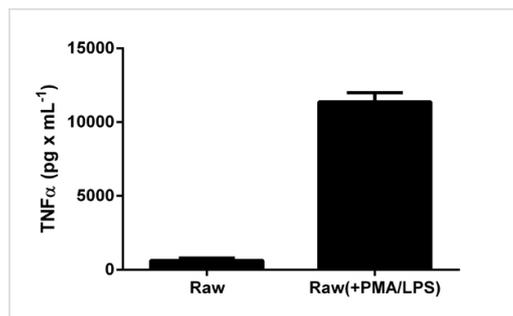
Involvement in disease Genetic variations in TNF are a cause of susceptibility psoriatic arthritis (PSORAS) [MIM:607507]. PSORAS is an inflammatory, seronegative arthritis associated with psoriasis. It is a heterogeneous disorder ranging from a mild, non-destructive disease to a severe, progressive, erosive arthropathy. Five types of psoriatic arthritis have been defined: asymmetrical oligoarthritis characterized by primary involvement of the small joints of the fingers or toes; asymmetrical arthritis which involves the joints of the extremities; symmetrical polyarthritis characterized by a rheumatoidlike pattern that can involve hands, wrists, ankles, and feet; arthritis mutilans, which is a rare but deforming and destructive condition; arthritis of the sacroiliac joints and spine (psoriatic spondylitis).

Sequence similarities Belongs to the tumor necrosis factor family.

Post-translational modifications The soluble form derives from the membrane form by proteolytic processing. 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.

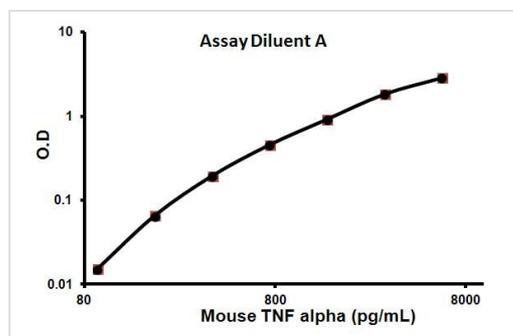
Cellular localization Secreted and Cell membrane.

Images



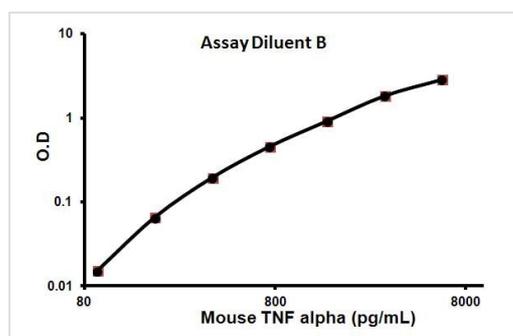
TNF-alpha was measured in cell culture medium from Raw control cells, or cells stimulated with PMA (10 ng x mL⁻¹; 24 h) and LPS (1 ug x mL⁻¹; 6 h). Results are shown with background signal subtracted (duplicates +/- SD).

Sandwich ELISA - TNF alpha Mouse ELISA Kit
(ab100747)



Representative Standard Curve using ab100747

Representative Standard Curve



Representative Standard Curve using ab100747

Representative Standard Curve

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