

Tumor Necrosis Factor beta ELISA Kit | TNF-b elisa kit

Tumor Necrosis Factor beta (TNF-b)

CATALOG #
AAA77863

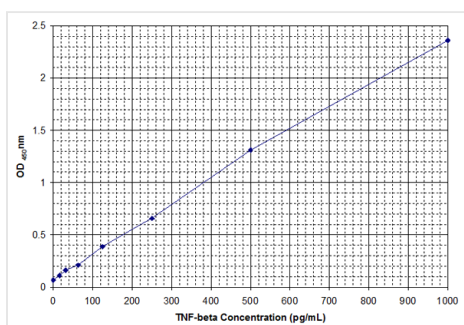
PRODUCT SYNONYMS

Tumor Necrosis Factor beta; Tumor Necrosis Factor beta (TNF-b); TNF-b elisa kit

PRODUCT SPECIFICATIONS

Specificity	This assay can detect both natural and recombinant human TNF-beta. The following factors were assayed in Calibrator Diluent I for cross-reactivity. No significant crossreactivity was observed. Recombinant human: IL-1alpha, IL-1beta, IL-2, IL-4, IL-6, IL-8, GM-CSF, TGF-beta1, bFGF, TNF-alpha, TNF-beta.
Sequence Length	205
Samples	Serum, plasma, and Cell Culture Supernatant
Assay Type	Sandwich
Sensitivity	The minimum detectable quantities of human TNF-beta as observed by the standard curve generated for both Calibrator Diluent I and Calibrator Diluent II are 22.0 pg/mL and 11.0 pg/mL respectively. The two standard deviations above the mean optical density of the 16 replicates of the zero standard were defined as the minimum detectable quantities.
Intra-assay Precision	To determine within-run precision, three different samples of known concentration were assayed by using 16 replicates in 1 assay.
Inter-assay Precision	To determine between-run precision, three different samples of known concentration were assayed by using replicates on 16 different assays.
Intended Uses	This Human TNF-beta ELISA kit is to be used for the in vitro quantitative determination of human Tumour Necrosis Factor Beta (TNF-beta) concentrations in serum, plasma, and cell culture supernatant. This kit is intended for LABORATORY RESEARCH USE ONLY and is not for use in therapeutic procedures.

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for TNF-beta elisa kit	Principle of the assay: This TNF-beta enzyme linked immunosorbent assay (ELISA) applies a technique called a quantitative sandwich immunoassay. The microtiter plate provided in this kit has been pre-coated with a monoclonal antibody specific to TNF-beta. Standards or samples are then added to the appropriate microtiter plate wells and incubated. After washing to remove unbound TNF-beta and other components of the sample, biotin-conjugated polyclonal antibody specific to TNF-beta is added and incubated. If present, TNF-beta will bind and become immobilized by the antibody pre-coated on the wells and then become "sandwiched" by the biotin conjugate. In order to quantitatively determine the amount of TNF-beta present in the sample, Avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated. Avidin is a tetramer containing four identical subunits, each having a high affinity-binding site for biotin. The wells are thoroughly washed to remove all unbound HRP-conjugated Avidin and a TMB (3,3',5,5' tetramethyl-benzidine) substrate solution is added to each well. The enzyme (HRP) and substrate are allowed to react over a short incubation period. Only those wells that contain TNF-beta, biotin-conjugated antibody and enzyme-conjugated Avidin will exhibit a change in colour. The enzyme-substrate reaction is terminated by the addition of a sulphuric acid solution and the colour change is measured spectrophotometrically at a wavelength of 450 nm +/- 2 nm. This kit includes two calibration diluents (Calibrator Diluent I for serum/plasma testing and Calibrator Diluent II for cell culture supernatant testing) in order to measure the concentration of TNF-beta in the samples. According to the testing system, the standard provided is diluted (2-fold) with the appropriate Calibrator Diluent and assayed at the same time as the samples. This allows the operator to produce a standard curve of Optical Density (O.D) versus TNF-beta concentration (pg/mL). The concentration of TNF-beta in the samples is then determined by comparing the O.D. of the samples to the standard curve.
Product Categories/Family for TNF-beta elisa kit	ELISA Kits for Human Cytokines and Receptors

NCBI AND UNIPROT INFORMATION

NCBI GI #	339743
NCBI GeneID	4049
Molecular Weight	22,297 Da
NCBI Official Full Name	tumor necrosis factor-beta
NCBI Official Synonym Full Names	lymphotoxin alpha
NCBI Official Symbol	LTA
NCBI Official Synonym Symbols	LT; TNFB; TNFSF1
NCBI Protein Information	lymphotoxin-alpha; LT-alpha; TNF superfamily, member 1; TNF-beta; tumor necrosis factor beta; tumor necrosis factor ligand superfamily member 1
UniProt Protein Name	Lymphotoxin-alpha
UniProt Gene Name	LTA
UniProt Entry Name	TNFB_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/tnf-beta-elisa-kits/tumor-necrosis-factor-beta/77863>