

Product datasheet

Human TNF alpha ELISA Set (without plates) ab47347

[1 Image](#)

Overview

Product name	Human TNF alpha ELISA Set (without plates)
Sample type	Cell culture supernatant, Serum, Plasma
Assay type	Sandwich (quantitative)
Sensitivity	< 10 pg/ml
Range	25 pg/ml - 800 pg/ml
Assay time	2h 45m
Assay duration	Multiple steps standard assay
Species reactivity	Reacts with: Human
Product overview	<p>Abcam's TNFα Human <i>in vitro</i> ELISA Set is designed for the quantitative measurement of TNFα in cell culture supernatants, buffered solutions, serum, plasma and other body fluids.</p> <p>The TNF alpha Elipair includes both the capture and the detection antibodies as well as Horse-Radish peroxidase conjugated Streptavidin (HRP-Strep) and TMB which are the reagents used in the colour development step.</p> <p>This Elipair set is intended to measure human TNF alpha in cell -culture supernatants, as well as in serum and plasma samples. The enclosed procedures provide general guidelines for ELISA preparation. This procedure may need some optimization depending on the plastic, matrix, standard range.</p> <p>Recognizes both natural and recombinant human TNF alpha.</p>
Tested applications	Suitable for: Sandwich ELISA
Platform	Reagents

Properties

Storage instructions Store at +4°C. Please refer to protocols.

Components	10 x 96 tests	5 x 96 tests
Chromogen TMB Substrate Solution	4 vials	2 vials

Components	10 x 96 tests	5 x 96 tests
Detection Biotinylated anti-TNF alpha Antibody	2 x 0.55ml	1 x 0.55ml
Streptavidin-HRP	2 vials	1 vial
TNF alpha Capture Antibody	2 x 0.5ml	1 x 0.5ml
TNF alpha Standard	10 vials	5 vials

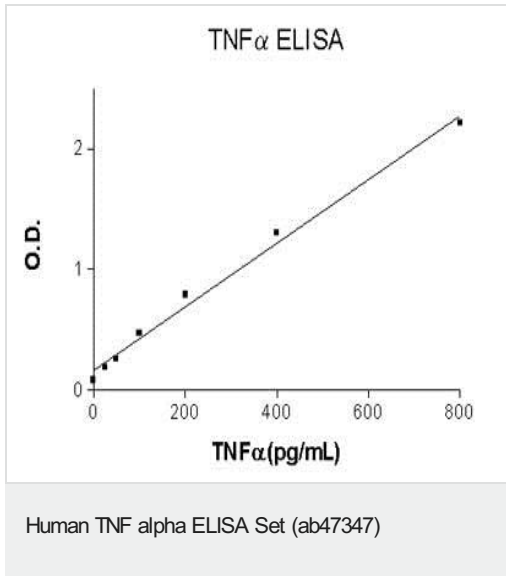
Function	Cytokine that binds to TNFRSF1A/TNFR1 and TNFRSF1B/TNFR2. It is mainly secreted by macrophages and can induce cell death of certain tumor cell lines. It is potent pyrogen causing fever by direct action or by stimulation of interleukin-1 secretion and is implicated in the induction of cachexia. 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.

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab47347 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Sandwich ELISA		Use at an assay dependent concentration.

Images



TNF alpha Standard curve ranging from 25 to 800 pg/mL

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors