

Rat TNF alpha ELISA Set (without plates) ab48419

1 Image

Overview

Product name	Rat TNF alpha ELISA Set (without plates)
Sample type	Cell culture supernatant, Serum, Plasma
Assay type	Sandwich (quantitative)
Sensitivity	< 15 pg/ml
Range	31.25 pg/ml - 1000 pg/ml
Assay time	3h 45m
Assay duration	Multiple steps standard assay
Species reactivity	Reacts with: Rat
Product overview	<p>Abcam's TNFα Rat <i>in vitro</i> ELISA Set is designed for the quantitative measurement of Rat TNFα in cell culture supernatants, buffered solutions, serum, plasma and other body fluids.</p> <p>The rat TNF alpha ELISA Set 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 ELISA Set is intended to measure rat TNF alpha in cell -culture supernatants, as well as in serum 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 Rat TNF alpha Range: 31.25 pg/ml - 1000 pg/ml Sensitivity < 15 pg/ml</p>
Tested applications	Suitable for: Sandwich ELISA
Platform	Reagents

Properties

Storage instructions	Store at +4°C. Please refer to protocols.
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Components	Identifier	10 x 96 tests	15 x 96 tests	5 x 96 tests
Chromogen TMB Substrate Solution		4 vials	6 vials	2 vials

Components	Identifier	10 x 96 tests	15 x 96 tests	5 x 96 tests
Detection biotinylated anti-rat TNF alpha antibody		2 x 0.55ml	3 x 0.55ml	1 x 0.55ml
Rat TNF alpha Capture antibody		2 x 0.5ml	3 x 0.5ml	1 x 0.5ml
Streptavidin-HRP		2 vials	3 vials	1 vial
TNF alpha Standard (Lyophilized)	Yellow	10 vials	15 vials	5 vials

Function

Cytokine that binds to TNFRSF1A/TNFR1 and TNFRSF1B/TNFR. 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

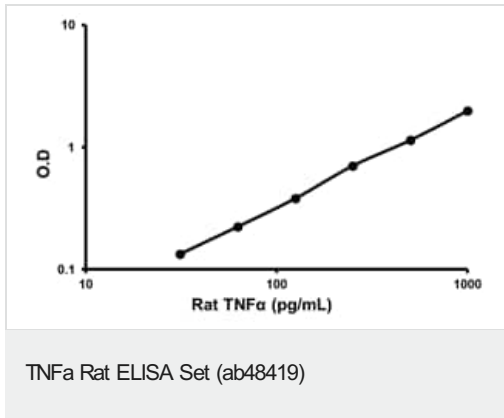
The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab48419 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



Representative Standard Curve using ab48419.

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

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