abcam

Product datasheet

Pig TNF alpha ELISA Kit ab 100756

9 References 1 Image

Overview

Product name Pig TNF alpha ELISA Kit

Detection methodColorimetric

Sample type Cell culture supernatant, Serum, Plasma

Assay type Sandwich (quantitative)

Sensitivity < 20 pg/ml

Range 0.049 ng/ml - 10 ng/ml

Recovery 100 %

Sample specific recovery

Sample type	Average %	Range
Cell culture supernatant	132.1	123% - 142%
Serum	111.7	102% - 121%
Plasma	97.02	70% - 126%

Assay duration Multiple steps standard assay

Species reactivity Reacts with: Pig

Product overview Abcam's TNF alpha Pig ELISA (Enzyme-Linked Immunosorbent Assay) kit is an in vitro enzyme-

linked immunosorbent assay for the quantitative measurement of Pig TNF-alpha in serum, plasma

and cell culture supernatants.

This assay employs an antibody specific for Pig 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-Pig 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 $450\ \text{nm}$.

Platform Microplate

Properties

1

Storage instructions

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

Components	1 x 96 tests
20X Wash Buffer	1 x 25ml
5X Assay Diluent B	1 x 15ml
600X HRP-Streptavidin Concentrate	1 x 200µl
Assay Diluent C	1 x 30ml
Biotinylated anti-Pig TNF alpha	2 vials
Recombinant Pig 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/TNFBR. 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.

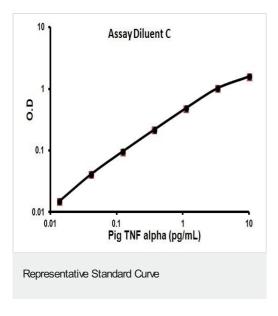
The membrane form, but not the soluble form, is phosphorylated on serine residues.

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



Representative Standard Curve using ab100756

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