# abcam

### Product datasheet

## Human TNF beta ELISA Kit ab229202

יילצעבע SimpleStep ELISA

画像数5

製品の概要

製品名

Human TNF beta ELISA Kit

検出方法

Colorimetric

再現性

Intra-Assay(同時再現性)

サンプル	N	平均値	SD	CV%
PBMC s/n	9			2.5%

Inter-Assay(日差再現性)

サンプル	N	平均値	SD	CV%
PBMC s/n	3			3.3%

サンプルの種類

Cell culture supernatant, Serum, Hep Plasma, EDTA Plasma, Cit plasma

アッセイタイプ

Sandwich (quantitative)

検出感度

1.84 pg/ml

検出範囲

16 pg/ml - 1000 pg/ml

添加回収試験

特定サンプルでの回収試験

サンプルの種類	平均 %	測定範囲
Cell culture supernatant	101	98% - 103%
Serum	82	82% - 83%
Hep Plasma	87	87% - 89%
EDTA Plasma	81	80% - 82%
Cit plasma	80	79% - 81%

全工程の試験時間

1h 30m

ステップ

One step assay

#### 種交差性

#### 製品の概要

#### 交差種: Human, Rhesus monkey

Human TNF beta ELISA Kit (ab229202) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of TNF beta protein in cell culture supernatant, serum, cit plasma, edta plasma, and hep plasma. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human TNF beta with 1.84 pg/ml sensitivity.

SimpleStep ELISA® technology employs capture antibodies conjugated to an affinity tag that is recognized by the monoclonal antibody used to coat our SimpleStep ELISA® plates. This approach to sandwich ELISA allows the formation of the antibody-analyte sandwich complex in a single step, significantly reducing assay time. See the SimpleStep ELISA® protocol summary in the image section for further details. Our SimpleStep ELISA® technology provides several benefits:

- Single-wash protocol reduces assay time to 90 minutes or less
- High sensitivity, specificity and reproducibility from superior antibodies
- Fully validated in biological samples
- 96-wells plate breakable into 12 x 8 wells strips

A 384-well SimpleStep ELISA® microplate (<u>ab203359</u>) is available to use as an alternative to the 96-well microplate provided with SimpleStep ELISA® kits.

#### 試験プラットフォーム

Pre-coated microplate (12 x 8 well strips)

#### 製品の特性

#### 保存方法

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

内容	1 x 96 tests
10X Human TNF beta Capture Antibody	1 x 600µl
10X Human TNF beta Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
Antibody Diluent CPR	1 x 6ml
Human TNF beta Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent NS (ab193972)	1 x 50ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

#### 機能

Cytokine that in its homotrimeric form binds to TNFRSF1A/TNFR1, TNFRSF1B/TNFBR and TNFRSF14/HVEM. In its heterotrimeric form with LTB binds to TNFRSF3/LTBR. Lymphotoxin is

#### 関連疾患

produced by lymphocytes and cytotoxic for a wide range of tumor cells in vitro and in vivo.

Genetic variations in LTA 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).

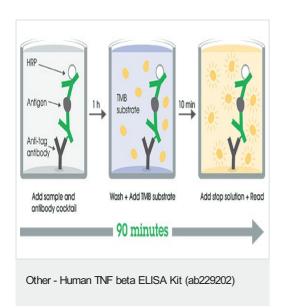
配列類似性

Belongs to the tumor necrosis factor family.

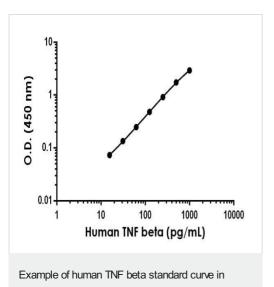
細胞内局在

Secreted. Membrane. The homotrimer is secreted. The heterotrimer is membrane-associated.

#### 画像

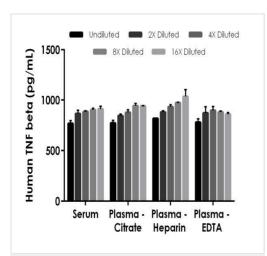


SimpleStep ELISA technology allows the formation of the antibodyantigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.



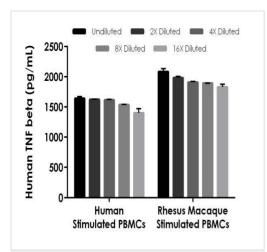
Sample Diluent NS.

The TNF beta standard curve was prepared as described in Section 10. Background-subtracted data values (mean +/- SD) are graphed.



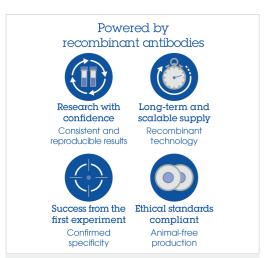
Interpolated concentrations of spiked TNF beta in human serum and plasma samples.

The concentrations of TNF beta were measured in duplicates, interpolated from the TNF beta standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 25%, plasma (citrate) 25%, plasma (heparin) 25% and plasma (EDTA) 25%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2).



Interpolated concentrations of native TNF beta in human and Rhesus Macaque PBMC cell culture supernatants.

PBMCs were either stimulated with 1.5% PHA or unstimulated for 48 hours. The concentrations of TNF beta were measured in duplicate and interpolated from the TNF beta standard curve and corrected for sample dilution. Undiluted samples are as follows: Stimulated human PBMC supernatant 25% and stimulated Rhesus Macaque PBMC supernatant 25%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean TNF beta concentration was determined to be 1,660 pg/mL in the stimulated human PBMC supernatant, 1,940 pg/mL in the Rhesus Macaque stimulated PBMC supernatant, and undetectable in the unstimulated human PBMC supernatant (not shown).



To learn more about the advantages of recombinant antibodies see **here**.

Sandwich ELISA - Human TNF beta ELISA Kit (ab229202)

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