# abcam

## Product datasheet

# Human sTNF RI ELISA Kit ab209881

重组 SimpleStep ELISA

### 7 图像

#### 概述

产品名称

人sTNF RIELISA试剂盒

检测方法

Colorimetric

精确度

批次内

样品	n	Mean	SD	CV%
Human serum	5			2.3%

批次间

样品	n	Mean	SD	CV%
Human serum	3			6.1%

样品类型

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

检测类型

Sandwich (quantitative)

灵敏度

1.9 pg/ml

范围

15.6 pg/ml - 1000 pg/ml

回收率

特定样本回收率

样品类型	平均%	范围
Urine	107	102% - 116%
Serum	101	87% - 110%
Cell culture media	108	108% - 109%
Hep Plasma	109	105% - 112%
EDTA Plasma	99	89% - 105%
Cit plasma	98	90% - 105%

**检测时间** 1h 30m

实验**步**骤 One step assay

种属反应性 与反应: Human

不与反应: Cow

产品概述

Human sTNF RI ELISA Kit (ab209881) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of sTNF RI protein in cell culture supernatant, cit plasma, edta plasma, hep plasma, serum, and urine. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human sTNF RI with 1.9 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.

说明

Tumor necrosis factor receptor superfamily member 1A (TNF RI) is a transmembrane protein with an extracellular domain that binds to TNF alpha. This extracellular domain can be proteolytically cleaved to make soluble TNF RI. The standard protein in this kit is soluble TNF RI and the capture and detector antibodies were raised against this region of TNF RI.

平台

Microplate (12 x 8 well strips)

#### 性能

#### 存放说明

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

组 <b>件</b>	1 x 96 tests
10X Human sTNF R1 Capture Antibody	1 x 600µl
10X Human sTNF R1 Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
Antibody Diluent 5BI	1 x 6ml
Human sTNF R1 Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent NS (ab193972)	1 x 50ml

组件	1 x 96 tests
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

功能 Receptor for TNFSF2/TNF-alpha and homotrimeric TNFSF1/lymphotoxin-alpha. The adapter

molecule FADD recruits caspase-8 to the activated receptor. The resulting death-inducing

signaling complex (DISC) performs caspase-8 proteolytic activation which initiates the

subsequent cascade of caspases (aspartate-specific cysteine proteases) mediating apoptosis. Contributes to the induction of non-cytocidal TNF effects including anti-viral state and activation of

the acid sphingomyelinase.

**疾病相关** Familial hibernian fever

Multiple sclerosis 5

序列相似性 Contains 1 death domain.

Contains 4 TNFR-Cys repeats.

结**构域** The domain that induces A-SMASE is probably identical to the death domain. The N-SMASE

activation domain (NSD) is both necessary and sufficient for activation of N-SMASE.

Both the cytoplasmic membrane-proximal region and the C-terminal region containing the death

domain are involved in the interaction with TRPC4AP.

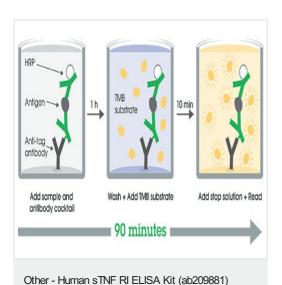
翻译后修饰 The soluble form is produced from the membrane form by proteolytic processing.

细胞定位 Cell membrane. Golgi apparatus membrane. Secreted. A secreted form is produced through

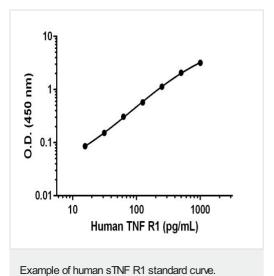
proteolytic processing and Secreted. Lacks a Golgi-retention motif, is not membrane bound and

therefore is secreted.

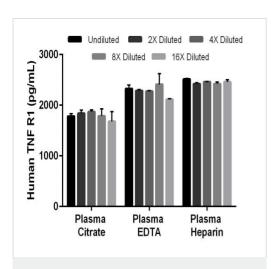
#### 图片



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.

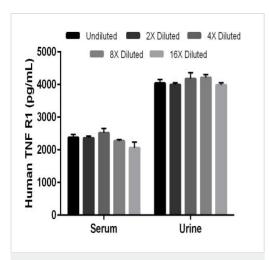


Background-subtracted data values (mean +/- SD) are graphed.



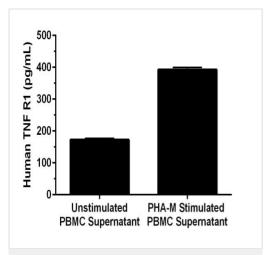
The concentrations of sTNF R1 were measured in duplicates, interpolated from the TNF R1 standard curves and corrected for sample dilution. Undiluted samples are as follows: plasma (citrate) 6.25%, plasma (EDTA) 6.25%, and plasma (heparin) 6.25%. The interpolated dilution factor corrected values are plotted (mean +/-SD, n=2). The mean sTNF R1 concentration was determined to be 1,791 pg/mL in plasma (citrate), 2,282 pg/mL in plasma (EDTA) and 2,455 pg/mL in plasma (heparin).

Interpolated concentrations of native sTNF R1 in human plasma samples.



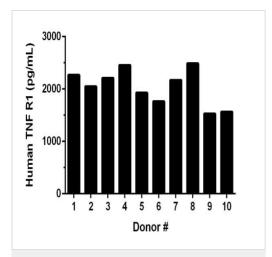
Interpolated concentrations of native sTNF R1 in human serum and urine samples.

The concentrations of sTNF R1 were measured in duplicates, interpolated from the sTNF R1 standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 6.25% and urine 6.25%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean sTNF R1 concentration was determined to be 2,318 pg/mL in serum and 4,082 pg/mL in urine.



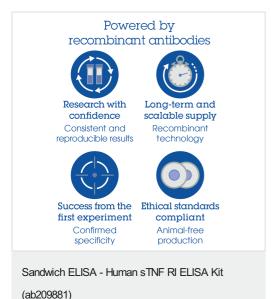
Peripheral Blood Mononuclear Cells (PBMC) were grown in the absence (unstimulated) or presence of phytohemagglutinin M (PHA-M) for 2 days.

Human sTNF R1 was measured in 2-fold diluted cell culture supernatants of unstimulated and PHA-M stimulated PBMC and cell culture media. Measured values were interpolated from the sTNF R1 standard curve diluted in Sample Diluent NS and corrected for dilution factor. Mean of the duplicate values +/- SD are graphed: 86.1 pg/mL unstimulated, 196.4 pg/mL stimulated and undetectable in media.



Serum from ten individual healthy female human donors was measured in duplicate.

Interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean sTNF R1 concentration was determined to be 2,043 pg/mL with a range of 1,500 - 2,509 pg/mL



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

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