

Anti-Human sTNF RI Antibody [PSH09-89] - BSA and Azide free (Capture)

HA723158



Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	ELISA(Cap)
Clone number:	PSH09-89

Description: This gene encodes a member of the TNF receptor superfamily of proteins. The encoded receptor is found in membrane-bound and soluble forms that interact with membrane-bound and soluble forms, respectively, of its ligand, tumor necrosis factor alpha. Binding of membrane-bound tumor necrosis factor alpha to the membrane-bound receptor induces receptor trimerization and activation, which plays a role in cell survival, apoptosis, and inflammation. Proteolytic processing of the encoded receptor results in release of the soluble form of the receptor, which can interact with free tumor necrosis factor alpha to inhibit inflammation. Mutations in this gene underlie tumor necrosis factor receptor-associated periodic syndrome (TRAPS), characterized by fever, abdominal pain and other features. Mutations in this gene may also be associated with multiple sclerosis in human patients.

Immunogen: Recombinant protein within Human TNF RI aa 30-211.

Positive control: Recombinant Human sTNF RI Protein (HA210562).

Subcellular location: Secreted. Cell membrane.

Database links: SwissProt: P19438 Human

Recommended Dilutions:

ELISA(Cap) Use at an assay dependent concentration. Can be paired for Sandwich ELISA with Rabbit monoclonal [PSH09-90] to Human sTNF RI antibody (Detector) (HA723159) and Recombinant Human sTNF RI protein (HA210562) as the standard. The reference range value is 15.6-4,000 pg/ml.

Storage Buffer: PBS (pH7.4).

Storage Instruction: Store at +4°C after thawing. Aliquot store at -20°C. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

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Images

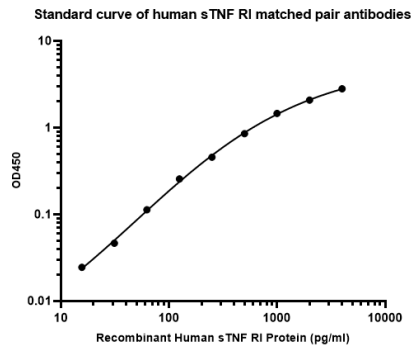


Fig1: Sandwich ELISA analysis of Human sTNF RI matched pair antibodies

Elisa assay was performed by coating wells of a 96-well plate with 100 μ l per well of capture antibody (HA723154) diluted in carbonate/bicarbonate buffer, at a concentration of 2 μ g/ml overnight at 4 $^{\circ}$ C. Wells of the plate were washed, blocked with 150 μ l 0.05% tween-20 1% BSA blocking buffer, and incubated with serial diluted Recombinant Human sTNF RI Protein (HA210562) starting from 10000 pg/ml to 0 pg/ml and detect antibody (HA723159, Biotin, 0.2 μ g/ml) for 1 hour at 30 $^{\circ}$ C with shaking. Then the plate was washed and incubated with 100 μ l per well of SA-HRP for 0.5 hour at 30 $^{\circ}$ C with shaking. Detection was performed using an Ultra TMB Substrate for 10 minutes at room temperature in the dark. The reaction was stopped with sulfuric acid and absorbances were read on a spectrophotometer at 450 nm.

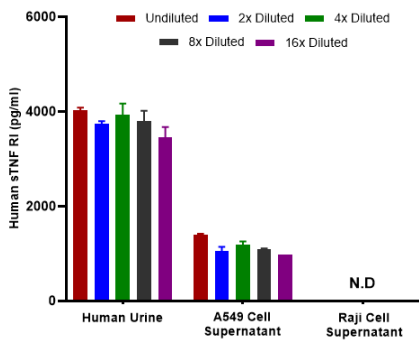


Fig2: Interpolated concentrations of native sTNF R1 in human samples.

Interpolated concentration of native sTNF R1 was measured in duplicate at different sample concentrations and interpolated from the sTNF R1 standard curves. The interpolated dilution factor corrected values were plotted (mean \pm SD, n=2). The mean sTNF R1 concentration was determined to be 3,727 pg/mL in human urine and 1,145 pg/ml in A549 cell supernatant. There was no detectable signal in Raji supernatant.

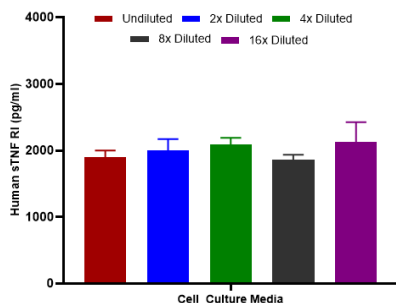


Fig3: Interpolated concentrations of spiked sTNF RI in cell culture media samples.

The concentrations of sTNF RI were measured in duplicates, interpolated from the sTNF RI standard curves and corrected for sample dilution. Undiluted samples are as follows: cell culture media 50%. The interpolated dilution factor corrected values are plotted (mean \pm SD, n=2).

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Nophar Y., Kemper O., Brakebusch C., Engelmann H., Zwang R., Aderka D., Holtmann H., Wallach D. Soluble forms of tumor necrosis factor receptors (TNF-Rs). The cDNA for the type I TNF-R, cloned using amino acid sequence data of its soluble form, encodes both the cell surface and a soluble form of the receptor. *EMBO J.* 9:3269-3278 (1990)
2. Gregory A.P., Dendrou C.A., Attfield K.E., Haghikia A., Xifara D.K., Butter F., Poschmann G., Kaur G., Lambert L., Fugger L. TNF receptor 1 genetic risk mirrors outcome of anti-TNF therapy in multiple sclerosis. *Nature* 488:508-511 (2012)

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