

## JOT0005-1: Anti-hTNFR1 VHH antibody

<b>Clonality :</b>	Monoclonal
<b>Application :</b>	ELISA,IHC,WB,IF
<b>Reactivity :</b>	Human
<b>Gene :</b>	TNFRSF1A
<b>Gene ID :</b>	7132
<b>Uniprot ID :</b>	P19438
<b>Alternative Name :</b>	TNFR-1, TNFR1, P55, P60, CD120A, Tumor necrosis factor receptor 1
<b>Isotype :</b>	Camelid VHH

### Description

Alpaca derived anti-TNFR1 VHH single domain antibody (molecular weight: 14.6 kDa) with a 6\*His tag at its C-terminal, expressed in E. coli under conditions free from animal derived components.

Tumor necrosis factor receptor 1 (TNFR1), also known as tumor necrosis factor receptor superfamily member 1A (TNFRSF1A) and CD120a (cluster of differentiation 120a), is an ubiquitous membrane receptor that binds tumor necrosis factor-alpha (TNFAlpha). It has been shown to be localized to both plasma membrane lipid rafts and the trans golgi complex with the help of the death domain (DD). TNFR1 can activate the transcription factor NF- $\kappa$ B, mediate apoptosis, and regulate inflammation processes.

This is a product from [Jotbody](#), Hong Kong. This antibody is made available worldwide by ABEOMICS Inc.

### Product Info

<b>Amount :</b>	100 $\mu$ g / 50 $\mu$ g
<b>Purification :</b>	Affinity chromatography purified via Ni-charged resin. Purity: > 95% as determined by SDS-PAGE
<b>Content :</b>	1mg/mL Buffer 25 mM TAPS pH8.5, 500 mM NaCl, 5 mM EDTA, 0.09 % NaN <sub>3</sub>
<b>Storage condition :</b>	4°C; Do not freeze.

### Application Note

Positive controls Positive ELISA detected in: recombinant human tumor necrosis factor receptor 1 Positive WB detected in: human hepatocellular carcinoma tissue Positive IHC detected in: human lung carcinoma tissue Positive IF detected in: MCF-7 cells

Recommended dilutions ELISA 1:1000-1:10000 WB 1:500-1:3000 IHC 1:100-1:300 IF 1:100-1:300

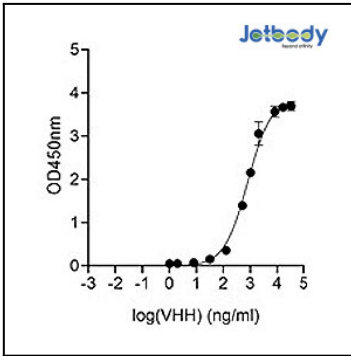


Figure 1: Indirect ELISA showing anti-TNFR1 VHH antibody (JOT0005-1) binding to purified PD-L1. Plates were coated with 200ng/well purified protein and binding of JOT0005-1 assessed in serial dilution from 1ng/ml primary antibody in triplicate.

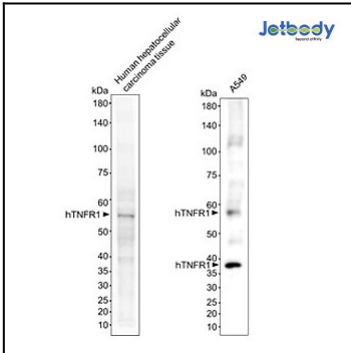


Figure 2: Lysates of human hepatocellular carcinoma tissue and A549 cells were respectively subjected to SDS- PAGE followed by western blot with anti-TNFR1 VHH antibody (JOT0005-1) at dilution of 1:3000 incubated at room temperature for 1.5 hours.

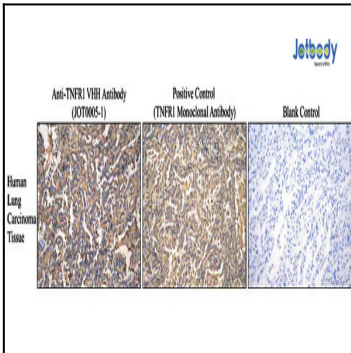


Figure 3: Immunohistochemical analysis of paraffin-embedded human lung carcinoma tissue slides using anti-TNFR1 VHH antibody (JOT0005-1) at 2.5ug/ml and positive control (TNFR1 monoclonal antibody, a competitor product) at 1:200 dilution (under 20x lens), respectively. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

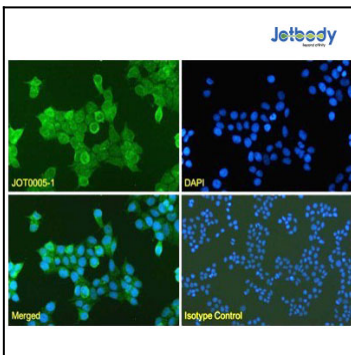


Figure 4: Immunofluorescence analysis of paraformaldehyde fixed MCF-7 cells stained with anti-TNFR1 VHH antibody (JOT0005-1) at 2.5 µg/ml followed by CoraLite® 488 secondary antibody at 1:200 dilution, showing cytoplasmic staining (under 40x lens). The nuclear stain is DAPI (blue). The isotype control was stained with anti-unknown antibody followed by CoraLite® 488 secondary antibody (under 20x lens).