

Basic Information

Product Name	Anti-TNFR1/TNFRSF1A Antibody	
Gene Name	TNFRSF1A	
Source	Rabbit	
Isotype	IgG	
Species Reactivity	human	
Tested Application	WB, IHC	
Contents	500 ug/ml antibody with PBS , 0.02% NaN3 , 1 mg BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human TNF Receptor I(195-211aa CLPQIENVKGTEDSGTT) .	
concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	55-60KD	
Dilution Ratios	Western blot(WB): 1:500-2000 Immunohistochemistry in paraffin section (IHC): 1:50-400 (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

Tumor necrosis factor receptor 1(TNFR1), a potent cytokine, elicits a broad spectrum of biologic responses which are mediated by binding to a cell surface receptor. Its gene is located on 12p13.2. The coding region and the 3-prime untranslated region of TNFR1 are distributed over 10 exons. There are 2 different proteins that serve as major receptors for TNF-alpha, one associated with myeloid cells and one associated with epithelial cells. Additionally, TNFR1 associates with the MADD protein through a death domain-death domain interaction. MADD provides a physical link between TNFR1 and the induction of mitogen-activated protein(MAP) kinase(e.g., ERK2) activation and arachidonic acid release. TNFR1-induced apoptosis involves 2 sequential signaling complexes. Complex I, the initial plasma membrane-bound complex, consists of TNFR1, the adaptor TRADD, the kinase RIP1, and TRAF2 and rapidly signals activation of NF-kappa-B. In a second step, TRADD and RIP1 associate with FADD and caspase-8, forming a cytoplasmic complex, complex II.

Selected Validation Data

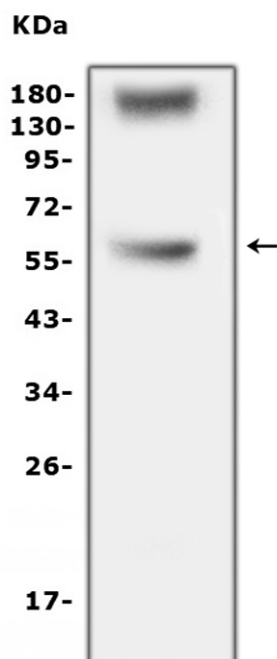


Figure 1. Western blot analysis of TNF Receptor I using anti- TNF Receptor I antibody (BA4891).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.

Lane 1: human SW579 whole cell lysates.

After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti- TNF Receptor I antigen affinity purified polyclonal antibody (Catalog # BA4891) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for TNF Receptor I at approximately 50-60KD. The expected band size for TNF Receptor I is at 50KD.