

Basic Information

Product Name	Anti-IkB Beta/NFKBIB Antibody	
Gene Name	NFKBIB	
Source	Rabbit	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC	
Contents	500 ug/ml antibody with PBS , 0.02% Na ₂ S ₂ O ₃ , 1 mg BSA and 50% glycerol.	
Immunogen	E.coli-derived human IKB beta recombinant protein (Position: E56-E237). Human IKB beta shares 82% and 80% amino acid (aa) sequence identity with mouse and rat IKB beta, respectively.	
concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	48KD	
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

NF-kappa-B inhibitor beta, also known as IKBB or TRIP9, is a protein that in humans is encoded by the NFKBIB gene. The protein encoded by this gene belongs to the NF-kappa-B inhibitor family, which inhibit NF-kappa-B by complexing with, and trapping it in the cytoplasm. This gene is mapped to 19q13.2. It has been found that in vivo, NFKBIB serves both to inhibit and to facilitate the inflammatory response. NFKBIB degradation releases NF-kappa-B dimers, which upregulate proinflammatory target genes such as TNF-alpha. Surprisingly, absence of NFKBIB results in a dramatic reduction of TNF-alpha in response to lipopolysaccharide, even though activation of NF-kappa-B is normal.

Selected Validation Data

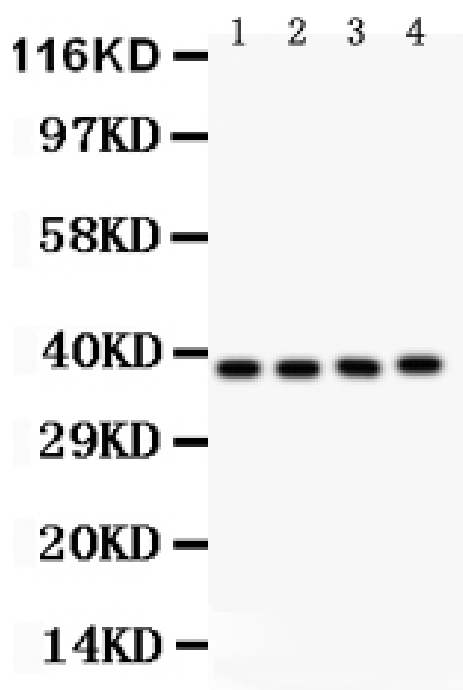


Figure 1. Western blot analysis of IκB beta using anti-IκB beta antibody (PB9292). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: Mouse Kidney Tissue Lysate, Lane 2: RH35 Whole Cell Lysate, Lane 3: NRK Whole Cell Lysate, Lane 4: HELA Whole Cell Lysate. 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-IκB beta antigen affinity purified polyclonal antibody (Catalog # PB9292) 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 IκB beta at approximately 38KD. The expected band size for IκB beta is at 38KD.

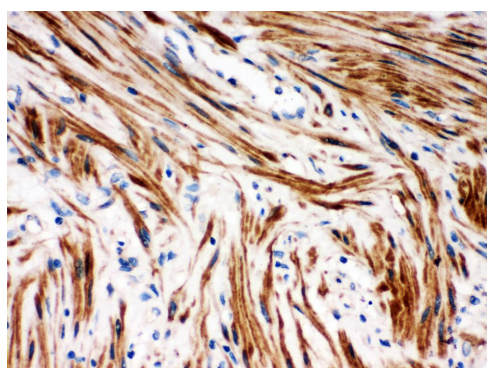


Figure 2. IHC analysis of IκB beta using anti-IκB beta antibody (PB9292). IκB beta was detected in paraffin-embedded section of Human Intestinal Cancer Tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1μg/ml rabbit anti-IκB beta Antibody (PB9292) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.