

Basic Information

Product Name	Anti-TIE2/TEK Antibody	
Gene Name	TEK	
Source	Rabbit	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, ICC/IF, FCM, ELISA	
Contents	500 ug/ml antibody with PBS , 0.02% NaN ₃ , 1 mg BSA and 50% glycerol.	
Immunogen	E.coli-derived human TIE2/TEK recombinant protein (Position: A23-R616).	
concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	160KD	
Dilution Ratios	Western blot(WB): 1:500-2000 Immunohistochemistry in paraffin section (IHC): 1:50-400 Immunocytochemistry in fixed cells: 1:50-400 Flow cytometry (FCM): 1-3 μ g/1x10 ⁶ cells (ELISA): 1:100-1000 (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

TIE2, also known as TEK tyrosine kinase, is mapped to 9p21.2. This gene encodes a receptor that belongs to the protein tyrosine kinase Tie2 family. The encoded protein possesses a unique extracellular region that contains two immunoglobulin-like domains, three epidermal growth factor (EGF)-like domains and three fibronectin type III repeats. The ligand angiopoietin-1 binds to this receptor and mediates a signaling pathway that functions in embryonic vascular development. Immunoblotting showed that TIE2 expression was increased by thyroid-stimulating hormone and agents that increased intracellular cAMP. HSCs expressing the receptor tyrosine kinase TIE2 are quiescent and antiapoptotic and comprise a side population of HSCs that adhere to osteoblasts in the bone marrow niche.

Selected Validation Data

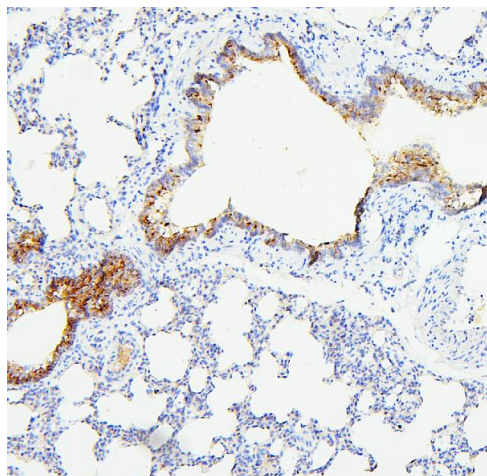


Figure 1. IHC analysis of TEK using anti-TEK antibody (A01274-2). TEK was detected in paraffin-embedded section of rat lung tissues. anti-TEK Antibody (A01274-2) . Biotinylated goat anti-rabbit IgG was used as secondary antibody . The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

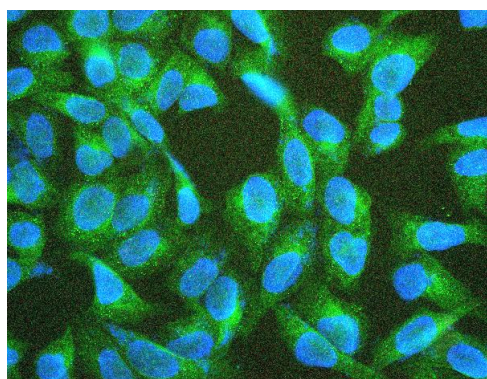


Figure 7. IF analysis of TEK using anti- TEK antibody (A01274-2). TEK was detected in immunocytochemical section of U2OS cell. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) DyLight488 Conjugated Goat Anti-Rabbit IgG (BA1127) was used as secondary antibody The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

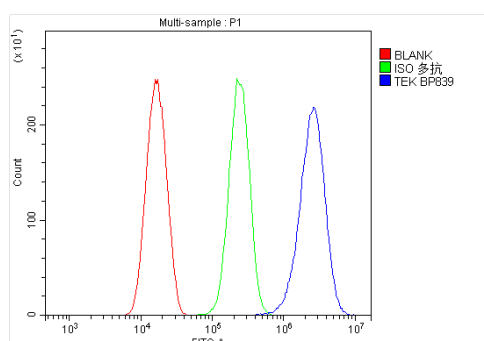


Figure 8. Flow Cytometry analysis of HeLa cells using anti-TEK antibody (A01274-2). Overlay histogram showing HeLa cells stained with A01274-2 (Blue line). DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10µg/1x10⁶ cells) was used as secondary antibody . Isotype control antibody (Green line) was rabbit IgG (1µg/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

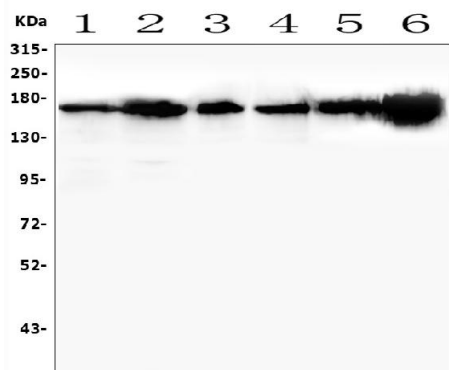


Figure 9. Western blot analysis of TEK using anti-TEK antibody (A01274-2).

Lane 1: human Hela whole cell lysates,

Lane 2: human U-87MG whole cell lysates,

Lane 3: human U2OS whole cell lysates,

Lane 4: human A431 whole cell lysates,

Lane 5: human PC-3 whole cell lysates,

Lane 6: human HL-60 whole cell lysates.

anti-TEK antigen affinity purified polyclonal antibody (Catalog # A01274-2) probed with a goat anti-rabbit IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002). A specific band was detected for TEK at approximately 160 kDa. The expected band size for TEK is at 126 kDa.