

Basic Information

Product Name	Anti-ANGPT2 Antibody	
Gene Name	ANGPT2	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, ICC/IF, FCM, IHC, ELISA	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E. coli-derived human Angiotensin-2/ANGPT2 recombinant protein (Position: N357-K404). Human ANGPT2 shares 83% amino acid (aa) sequence identity with both mouse and rat ANGPT2.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	70 kDa, 51 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 Flow Cytometry (Fixed): 1:50-200 Enzyme linked immunosorbent assay (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

ANGPT2, also known as ANG2 or Angiotensin 2, is a protein that in humans is encoded by the ANGPT2 gene. It is mapped to 8p23.1. ANGPT2 is a naturally occurring antagonist of ANG1 that competes for binding to the TIE2 receptor and blocks ANGPT1-induced TIE2 autophosphorylation during vasculogenesis. The encoded protein disrupts the vascular remodeling ability of ANGPT1 and may induce endothelial cell apoptosis. ANGPT2 was significantly increased in plasma and alveolar edema fluid in adults with acute lung injury compared to controls or

patients with hydrostatic pulmonary edema, tracheal. ANGPT2 was also significantly increased in neonates with respiratory distress syndrome who developed bronchopulmonary edema. It is also a mediator of epithelial necrosis with an important role in hyperoxic acute lung injury and pulmonary edema.

Reference

Anti-ANGPT2 Antibody 被引用在 10 文献中。

Selected Validation Data

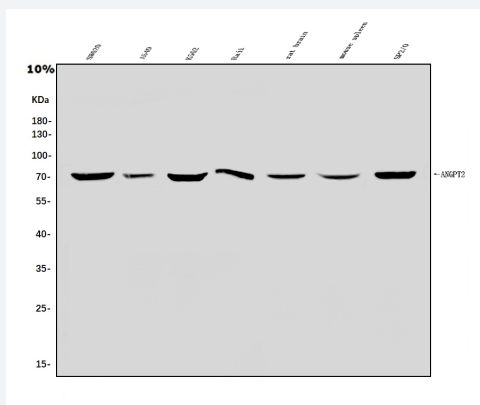


Figure 1. Western blot analysis of ANGPT2 using anti-ANGPT2 antibody (A00370-2). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human SW620 whole cell lysates,
Lane 2: human A549 whole cell lysates,
Lane 3: human K562 whole cell lysates,
Lane 4: human Raji whole cell lysates,
Lane 5: rat brain tissue lysates,
Lane 6: mouse spleen tissue lysates,
Lane 7: mouse SP2/0 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-ANGPT2 antigen affinity purified polyclonal antibody (A00370-2) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for ANGPT2 at approximately 70 kDa, 51 kDa. The expected band size for ANGPT2 is at 57 kDa, 51 kDa.

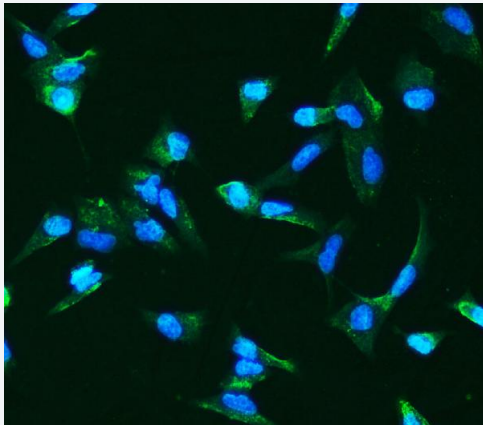


Figure 2. IF analysis of ANGPT2 using anti-ANGPT2 antibody (A00370-2).

ANGPT2 was detected in an immunocytochemical section of A549 cells. The section was incubated with rabbit anti-ANGPT2 Antibody (A00370-2) at a dilution of 1:100. DyLight®488 Conjugated Goat Anti-Rabbit IgG (Green) (Catalog # BA1127) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).

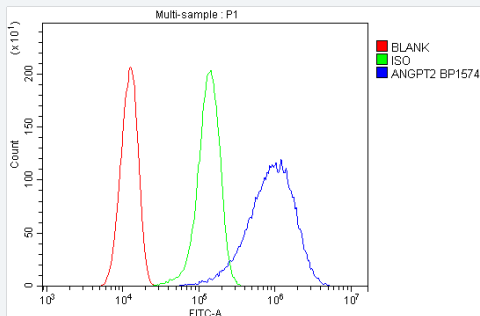


Figure 3. Flow Cytometry analysis of HeLa cells using anti-ANGPT2 antibody (A00370-2).

Overlay histogram showing HeLa cells stained with A00370-2 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-ANGPT2 Antibody (A00370-2) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

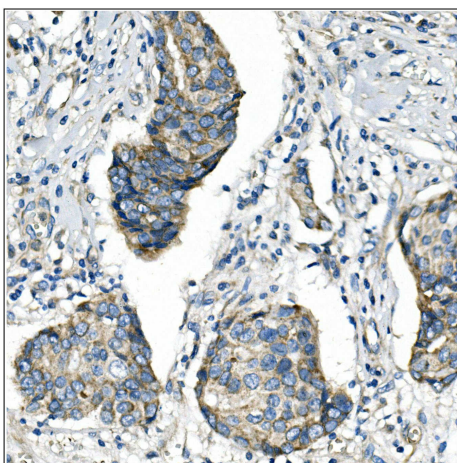


Figure 5. IHC analysis of ANGPT2 using anti-ANGPT2 antibody (A00370-2).

ANGPT2 was detected in a paraffin-embedded section of human mammary cancer tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-ANGPT2 Antibody (A00370-2) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1022) as the chromogen.