

Basic Information

Product Name	Anti-NOX2/CYBB Antibody	
Gene Name	CYBB	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human NOX2, identical to the related rat and mouse sequences.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	65 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (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.

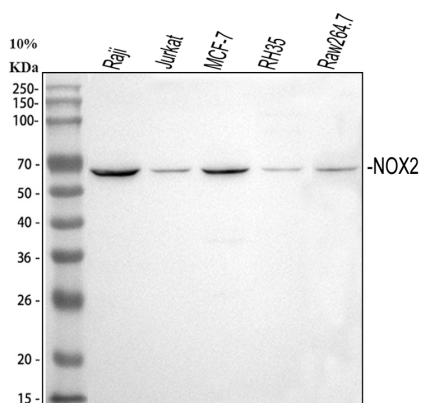
Background Information

NOX2(NADPH OXIDASE 2), also called CYBB(CYTOCHROME b(-245), BETA SUBUNIT), p91-PHOX or GP91-1, is a human gene encoding a glycoprotein. NOX2 is an essential component of phagocytic NADPH-oxidase, a membrane-bound enzyme complex that generates large quantities of microbicidal superoxide and other oxidants upon activation. It is mapped on Xp11.4. NOX2 is a heterodimer composed of an alpha chain of relative molecular mass 23 kD and a beta chain of 76 to 82 kD. NOX2 assembled on DC phagosomes in a gp91-phox subunit-dependent manner, and that reactive oxygen species were produced in a more sustained manner in immature DC phagosomes than in macrophage phagosomes. As a major player in innate immune responses in neutrophils, NOX2 is also involved in adaptive immunity through its activity in DCs. In heart cells, physiologic stretch rapidly activates reduced-form NOX2 to produce reactive oxygen species(ROS) in a process dependent on microtubules(X-ROS signaling).

Reference

Anti-NOX2/CYBB Antibody 被引用在22文献中。

Selected Validation Data



Western blot analysis of NOX2/CYBB using anti-NOX2/CYBB antibody (BA2811). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human Raji whole cell lysates,

Lane 2: human Jurkat whole cell lysates,

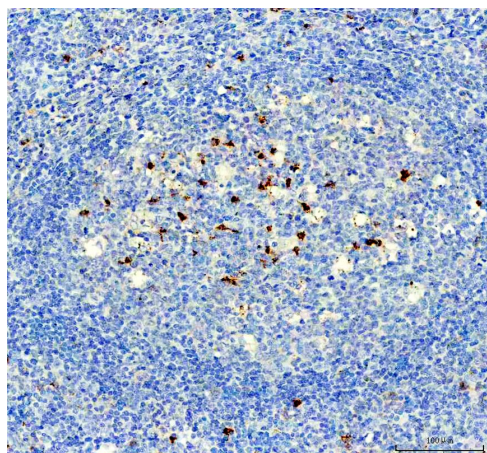
Lane 3: human MCF-7 whole cell lysates,

Lane 4: rat RH-35 whole cell lysates,

Lane 5: mouse RAW264.7 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-NOX2/CYBB antigen affinity purified polyclonal antibody (BA2811) 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 NOX2/CYBB at approximately 65 kDa. The expected band size for NOX2/CYBB is at 65 kDa.



IHC analysis of NOX2/CYBB using anti-NOX2/CYBB antibody (BA2811).

NOX2/CYBB was detected in a paraffin-embedded section of human tonsil tissue. The tissue section was incubated with rabbit anti-NOX2/CYBB Antibody (BA2811) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.