

Basic Information

Product Name	Anti-CARD4/NOD1 Antibody	
Gene Name	NOD1	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, rat	
Tested Application	WB, IHC, ICC/IF	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human CARD4 recombinant protein (Position: M1-M160). Human CARD4 shares 82% amino acid (aa) sequence identity with mouse CARD4.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	107 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Immunocytochemistry/Immunofluorescence (ICC/IF): 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.

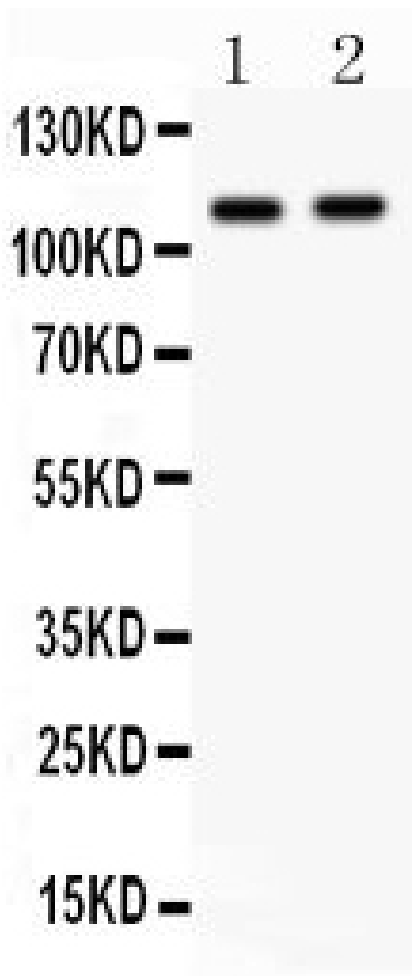
Background Information

Nucleotide-binding oligomerization domain-containing protein 1, also known as CARD4, is a protein receptor that in humans is encoded by the NOD1 gene. NOD1 is a member of NOD-like receptor protein family and is a close relative of NOD2. NOD1 is mapped to 7p14.3. It recognizes bacterial molecules and stimulates an immune reaction. NOD1 protein contains a caspase recruitment domain (CARD). This gene is an intracellular pattern recognition receptor, which is similar in structure to resistant proteins of plants, and mediates innate and acquired immunity by recognizing bacterial molecules containing D-glutamyl-meso-diaminopimelic acid (iE-DAP) moiety. What more, it has been shown that NOD1 can sense cytosolic microbial products by monitoring the activation state of small Rho GTPases.

Reference

Anti-CARD4/NOD1 Antibody被引用在1文献中。

Selected Validation Data

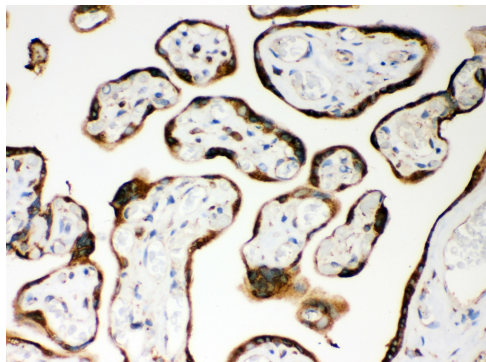


Western blot analysis of CARD4/NOD1 using anti-CARD4/NOD1 antibody (PB0283). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: A549 whole cell lysates,

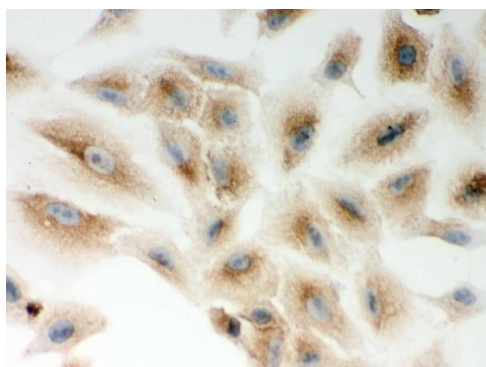
Lane 2: Rat Cardiac Muscle tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-CARD4/NOD1 antigen affinity purified polyclonal antibody (PB0283) 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 CARD4/NOD1 at approximately 107 kDa. The expected band size for CARD4/NOD1 is at 108 kDa.



IHC analysis of CARD4/NOD1 using anti-CARD4/NOD1 antibody (PB0283).

CARD4/NOD1 was detected in a paraffin-embedded section of human placenta tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-CARD4/NOD1 Antibody (PB0283) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.



ICC analysis of CARD4/NOD1 using anti- CARD4/NOD1 antibody (PB0283).

CARD4/NOD1 was detected in an immunocytochemical section of A549 cells. The section was incubated with rabbit anti-CARD4/NOD1 Antibody (PB0283) at a dilution of 1:100. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.