

## Basic Information

<b>Product Name</b>	Anti-CARD4/NOD1 Antibody
<b>Gene Name</b>	NOD1
<b>Source</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG
<b>Species Reactivity</b>	human, monkey
<b>Tested Application</b>	WB
<b>Contents</b>	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.
<b>Immunogen</b>	A synthetic peptide corresponding to a sequence at the C-terminus of human CARD4/NOD1, which shares 88.2% and 93.8% amino acid (aa) sequence identity with mouse and rat CARD4/NOD1, respectively.
<b>Concentration</b>	500 ug/ml
<b>Purification</b>	Immunogen affinity purified.
<b>Observed MW</b>	107 kDa
<b>Dilution Ratios</b>	Western blot (WB):1:500-2000

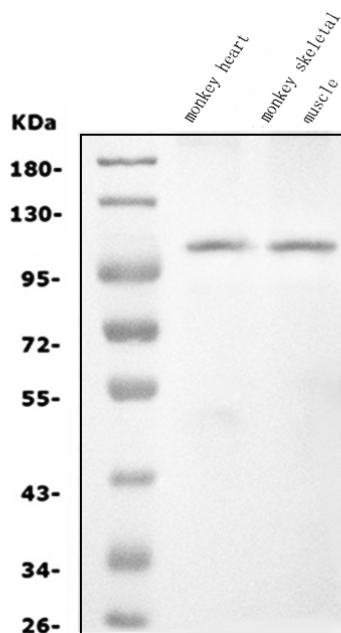
## Storage

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.

## Selected Validation Data



Western blot analysis of CARD4/NOD1 using anti-CARD4/NOD1 antibody (A00495-1). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: monkey heart tissue lysates,

Lane 2: monkey skeletal 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 (A00495-1) 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.