

## Basic Information

Product Name	Anti-CARD4/NOD1 Antibody	
Gene Name	NOD1	
Source	Rabbit	
Isotype	IgG	
Species Reactivity	human	
Tested Application	WB, IHC, FCM, ELISA	
Contents	500 ug/ml antibody with PBS , 0.02% NaN <sub>3</sub> , 1 mg BSA and 50% glycerol.	
Immunogen	E.coli-derived human CARD4/NOD1 recombinant protein (Position: N26-F953).	
concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	107KD	
Dilution Ratios	Western blot(WB): 1:500-2000 Immunohistochemistry in paraffin section IHC 1:50-400 Flow cytometry (FCM): 1-3 µg/1x10 <sup>6</sup> 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

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

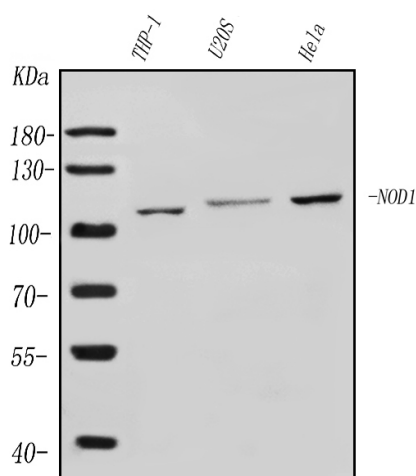


Figure 1. Western blot analysis of anti- NOD1 antibody (A00495-2).The sample well of each lane was loaded with 50ug of sample under reducing conditions.Lane 1: human THP-1 whole cell lysates,Lane 2: human U2OS whole cell lysates,Lane 3: human HELA whole cell lysates.Use rabbit anti- NOD1 1:1000, probed 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 NOD1 at approximately 107KD. The expected band size for NOD1 is at 107KD.