COSMO BIO CO., LTD.
Inspiration for Life Science

**POLYCLONAL ANTIBODY**

*For research use only, Not for diagnostic use.*

**Catalog No. THU-A-NOD1**

# Anti Porcine NOD1
## [ nucleotide-binding oligomerization domain ]

**BACKGROUND**

A cytosolic surveillance system mediated by the nucleotide-binding oligomerization domain (NOD) proteins plays an important role in recognizing intracellular microbe-associated molecular patterns (MAMPs). It has been found that *meso*-diaminopimelic acid (*meso*-DAP)-containing peptide moieties, such as γ-D-glutamyl-*meso*-DAP (iE-DAP) are recognized by NOD1. Porcine NOD1 is more closely related to the human protein than the mouse counterpart and that it is expressed not only in the cytoplasm but also on the inner side of the plasma membrane in the transfected cells. This antibody is useful for biochemical and immunohistochemical analyzes of porcine NOD1 and for clarifying how the immune system is modulated by low-molecular weight peptidoglycan fragments through NOD1.

| | |
|---|---|
| **Product type** | Primary antibody |
| **Immunogen** | Amino acids 404-416 of porcine NOD1 |
| **Host Species** | Rabbit |
| **Fusion Partner** | - |
| **Clone Designation** | - |
| **Isotype** | - |
| **Source** | Serum |
| **Purification** | Immunogen affinity purified |
| **Buffer** | Phosphate Buffered Saline (PBS, pH7.4) with 0.1% $NaN_3$ as a preservative* |
| **Concentration** | 0.84 mg / mL |
| **Volume** | 50UL |
| **Label** | Unlabeled |
| **Specificity** | Porcine NOD1 |
| **Cross reactivity** | Reacts with porcine. Not yet tested in other species. |
| **Storage** | Store below -20°C (below -70°C for prolonged storage).<br>Aliquot to avoid cycles of freeze/thaw. |

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**Application notes**
**Recommended dilutions**

- **Immunohistochemistry**: 1/25-1/500
- **Flow cytometry**: 1/50-1/500
- **Western blotting**: 1/25-1/500

Other applications have not been tested.
Optimal dilutions/concentrations should be determined by the end user.

**References**

1) Tohno M, Shimazu T, Aso H, Uehara A, Takada H, Kawasaki A, Fujimoto Y, Fukase K, Saito T, Kitazawa H., Molecular cloning and functional characterization of porcine nucleotide-binding oligomerization domain-1 (NOD1) recognizing minimum agonists, meso-diaminopimelic acid and meso-lanthionine. Mol Immunol. 2008 Mar;45(6):1807-17. PMID: 17983657

## ANTIBODY CHARACTERIZATION

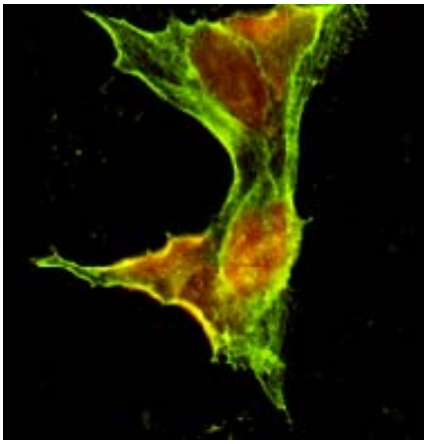

**Fig.1 Immunofluorescence staining** of NOD1 in **Porcine NOD1-expressing HEK293 cells** with anti Porcine NOD1 antibody. [ Green: NOD1, Red: Nuclei ] Ref.1)

## RELATED PRODUCT:

| Product Name | Application | Quantity | Maker | Cat# |
|---|---|---|---|---|
| Anti porcine TLR2 Polyclonal Antibody | WB / IHC / FCM / IP / ELISA | 50 UL | CAC | THU-A-TLR2 |
| Anti porcine TLR9 Polyclonal Antibody | WB / IHC / FCM / IP / ELISA | 50 UL | CAC | THU-A-TLR9 |
| Anti porcine NOD1 Polyclonal Antibody | WB / IHC / FCM | 50 UL | CAC | THU-A-NOD1 |
| Anti porcine NOD2 Polyclonal Antibody | WB / IHC / FCM | 50 UL | CAC | THU-A-NOD2 |
| Anti porcine PGLYRP3 Polyclonal Antibody | WB / IHC / FCM / IP / ELISA | 100 UL | COP | COP-080060 |
| Anti porcine PGLYRP4 Polyclonal Antibody | WB / IHC / FCM / IP / ELISA | 100 UL | COP | COP-080061 |

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