

# PRODUCT INFORMATION



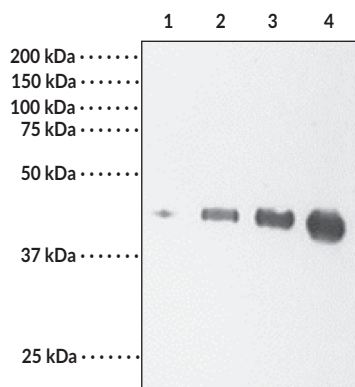
## Nod2 Polyclonal Antibody

Item No. 160777

### Overview and Properties

<b>Contents:</b>	This vial contains 100 µg of protein A purified antibody.
<b>Synonyms:</b>	Caspase recruitment domain-containing protein 15, Inflammatory bowel disease protein 1, Nucleotide-binding oligomerization domain-containing protein 2
<b>Immunogen:</b>	Recombinant protein fragment from the internal region of human Nod2
<b>Species Reactivity:</b>	(+) Human; other species not tested
<b>Uniprot No.:</b>	Q9HC29
<b>Form:</b>	Liquid
<b>Storage:</b>	-20°C (as supplied)
<b>Stability:</b>	≥3 years
<b>Storage Buffer:</b>	TBS, pH 7.4, with 50% glycerol, 0.1% BSA, and 0.02% sodium azide
<b>Host:</b>	Rabbit
<b>Applications:</b>	Western blot; the recommended starting dilution is 1:200. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

### Image



Lane 1: Nod2 Recombinant Fragment (0.01 µg)  
Lane 2: Nod2 Recombinant Fragment (0.02 µg)  
Lane 3: Nod2 Recombinant Fragment (0.03 µg)  
Lane 4: Nod2 Recombinant Fragment (0.05 µg)

**WARNING**  
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

**SAFETY DATA**  
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

**WARRANTY AND LIMITATION OF REMEDY**  
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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## Description

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Nod2 is a member of a protein family of apoptosis regulators which includes Apaf-1 and Nod1/CARD4.<sup>1</sup> Nod2 contains two N-terminal caspase recruitment domains (CARDs), a nucleotide binding domain (NBD) and C-terminal leucine rich repeats (LRRs). Nod1/CARD4 is broadly expressed in tissues; however, Nod2 expression is limited to monocytes.<sup>1,2</sup> Both Nod1 and Nod2 activate NF- $\kappa$ B and act as intracellular receptors for bacterial lipopolysaccharides (LPS).<sup>2-5</sup> The LRRs of both Nod1 and Nod2 are essential for LPS-induced activation of NF- $\kappa$ B.<sup>4</sup> A frameshift mutation in the NOD2 gene confers susceptibility to Crohn's disease, possibly by causing truncation of the 10th LRR resulting in a protein that is unresponsive to LPS.<sup>6,7</sup>

## References

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1. Ogura, Y., Inohara, N., Benito, A., *et al.* Nod2, a Nod1/Apaf-1 family member that is re-restricted to monocytes and activates NF- $\kappa$ B. *J. Biol. Chem.* **276**(7), 4812-4818 (2001).
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3. Inohara, N., Koseki, T., Lin, J., *et al.* An induced proximity model for NF- $\kappa$ B activation in the Nod1/RICK and RIP signaling pathways. *J. Biochem.* **275**(36), 27823-27831 (2000).
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5. Inohara, N., Koseki, T., del Peso, L., *et al.* Nod1, an Apaf-1-like activator of caspase-9 and nuclear factor- $\kappa$ B. *J. Biol. Chem.* **274**(21), 14560-14567 (1999).
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