

## DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects human NOD1 in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant human NOD2 is observed.                                                                                                                     |
| <b>Source</b>             | Monoclonal Mouse IgG <sub>2B</sub> Clone # 626919                                                                                                                                                                                                                           |
| <b>Purification</b>       | Protein A or G purified from hybridoma culture supernatant                                                                                                                                                                                                                  |
| <b>Immunogen</b>          | <i>E. coli</i> -derived recombinant human NOD1<br>Lys830-Phe953<br>Accession # Q9Y239                                                                                                                                                                                       |
| <b>Conjugate</b>          | Alexa Fluor 647<br>Excitation Wavelength: 650 nm<br>Emission Wavelength: 668 nm                                                                                                                                                                                             |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

|                             |                                                                        |
|-----------------------------|------------------------------------------------------------------------|
| <b>Western Blot</b>         | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunohistochemistry</b> | Optimal dilution of this antibody should be experimentally determined. |

## PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

## BACKGROUND

NOD1, also called CARD4, is a 108 kDa intracellular pattern recognition receptor of the Nod-like receptor (NLR or Caterpillar) family. This innate immune receptor recognizes the muramyl peptide, diaminopimelic acid. The 953 amino acid (aa) NOD1 contains a caspase recognition domain (CARD), an NTPase domain and 10 leucine-rich repeats (LRR). Splicing variants of 925 and 779 aa lack all or part of LRR 7-10 and do not respond to muramyl peptides. Polymorphisms of NOD1 are associated with inflammatory bowel disease. Within aa 830-953 (LRR 7-110), human NOD1 shares 82% and 84% aa identity with mouse and rat NOD1, respectively.

## PRODUCT SPECIFIC NOTICES

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