

Anti-TLR3 Antibody Picoband®

Catalog Number: A00197

About TLR3

TLR3 (Toll-like receptor 3) also known as CD283 (cluster of differentiation 283) is a protein that in humans is encoded by the TLR3 gene. The TLR3 gene is mapped to chromosome 4q35 by fluorescence in situ hybridization. TLR3 is a member of the Toll-like receptor family of pattern recognition receptors of the innate immune system. TLRs are highly conserved from *Drosophila* to humans and share structural and functional similarities. They recognize pathogen-associated molecular patterns (PAMPs) that are expressed on infectious agents, and mediate the production of cytokines necessary for the development of effective immunity. The various TLRs exhibit different patterns of expression. This receptor is most abundantly expressed in placenta and pancreas, and is restricted to the dendritic subpopulation of the leukocytes. It recognizes dsRNA associated with viral infection, and induces the activation of NF-kappaB and the production of type I interferons. It may thus play a role in host defense against viruses. TLR3 recognizes double-stranded RNA, a form of genetic information carried by some viruses such as retroviruses. Upon recognition, TLR3 induces the activation of NF-kappaB to increase production of type I interferons which signal other cells to increase their antiviral defenses. Double-stranded RNA is also recognised by the cytoplasmic receptors RIG-I and MDA-5. TLR3 displays a protective role in mouse models of atherosclerosis.[4] In addition, TLR3 activators show effects on human vascular cells.

Overview

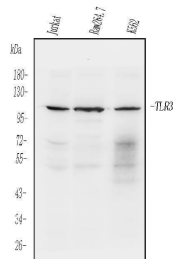
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| Product Name | Anti-TLR3 Antibody Picoband® |
| Reactive Species | Human, Mouse, Rat |
| Description | Boster Bio Anti-TLR3 Antibody Picoband® catalog # A00197. Tested in ELISA, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance. |
| Application | ELISA, WB |
| Clonality | Polyclonal |
| Formulation | Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ . |
| Storage Instructions | Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles. |
| Host | Rabbit |
| Uniprot ID | O15455 |

Technical Details

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| Immunogen | <i>E. coli</i> -derived human TLR3 recombinant protein (Position: F502-D648). |
| Recommended Detection Systems | Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot. |

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| Cross Reactivity | No cross-reactivity with other proteins. |
| Isotype | Rabbit IgG |
| Form | Lyophilized |
| Concentration | Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml. |
| Purification | Immunogen affinity purified. |
| Suggested Dilutions | Western blot, 0.1-0.5ug/ml ELISA, 0.1-0.5ug/ml |

Anti-TLR3 Antibody Picoband® (A00197) Images



Western blot analysis of TLR3 using anti-TLR3 antibody (A00197). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human Jurkat whole cell lysates, Lane 2: mouse Raw264.7 whole cell lysates, Lane 3: human K562 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-TLR3 antigen affinity purified polyclonal antibody (Catalog # A00197) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for TLR3 at approximately 120 kDa. The expected band size for TLR3 is at 104 kDa.

3 Publications Citing This Product

1. PubMed ID: 10.1089/scd.2019.0039, A Study of the Immunoregulatory Function of TLR3 and TLR4 on Mesenchymal Stem Cells in Ankylosing Spondylitis
2. PubMed ID: 33607154, Liao L,Huang L,Wei X,Yin L,Wei X,Li T.Bioinformatic and biochemical studies of formononetin against liver injure.Life Sci.2021 Feb 16:119229.doi:10.1016/j.lfs.2021.119229.Epub ahead of print.PMID:33607154.
3. PubMed ID: 33607154, Liao L,Huang L,Wei X,Yin L,Wei X,Li T.Bioinformatic and biochemical studies of formononetin against liver injure.Life Sci.2021 Feb 16:119229.doi:10.1016/j.lfs.2021.119229.Epub ahead of print.PMID:33607154.

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Anti-TLR3 Antibody

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