

TLR3 Antibody

Catalog # ASC10370

Product Information

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| Application | WB, IF, ICC, E |
| Primary Accession | O15455 |
| Other Accession | O15455 , 20140422 |
| Reactivity | Human, Mouse |
| Host | Rabbit |
| Clonality | Polyclonal |
| Isotype | IgG |
| Calculated MW | 103829 |
| Concentration (mg/ml) | 1 mg/mL |
| Conjugate | Unconjugated |
| Application Notes | TLR3 antibody can be used for detection of TLR3 by Western blot at 1 to 2 μ g/mL. Antibody can also be used for immunocytochemistry starting at 1 μ g/mL. For immunofluorescence start at 10 μ g/mL. |

Additional Information

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| Gene ID | 7098 |
| Other Names | TLR3 Antibody: CD283, IIAE2, Toll-like receptor 3, toll-like receptor 3 |
| Target/Specificity | TLR3; |
| Reconstitution & Storage | TLR3 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures. |
| Precautions | TLR3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures. |

Protein Information

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| Name | TLR3 (HGNC:11849) |
| Function | Key component of innate and adaptive immunity. TLRs (Toll- like receptors) control host immune response against pathogens through recognition of molecular patterns specific to microorganisms. TLR3 is a nucleotide-sensing TLR which is activated by double-stranded RNA, a sign of viral infection. Acts via the adapter TRIF/TICAM1, leading to NF-kappa-B activation, IRF3 nuclear translocation, cytokine secretion and the inflammatory response. |
| Cellular Location | Endoplasmic reticulum membrane; Single-pass type I membrane protein. Endosome membrane. Early endosome |

Tissue Location

Expressed at high level in placenta and pancreas. Also detected in CD11c+ immature dendritic cells. Only expressed in dendritic cells and not in other leukocytes, including monocyte precursors. TLR3 is the TLR that is expressed most strongly in the brain, especially in astrocytes, glia, and neurons

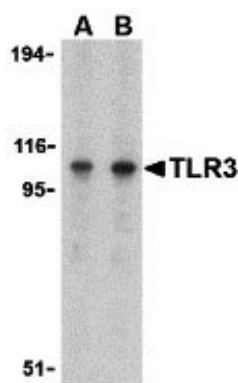
Background

TLR3 Antibody: Toll-like receptors (TLRs) are evolutionarily conserved pattern-recognition molecules resembling the toll proteins that mediate antimicrobial responses in *Drosophila*. These proteins recognize different microbial products during infection and serve as an important link between the innate and adaptive immune responses. The TLRs act through adaptor molecules such as MyD88 and TIRAP to activate various kinases and transcription factors so the organism can respond to potential infection. TLR3 is known to recognize viral double-stranded (ds) RNA, a molecular pattern associated with viral infection. Recently it has been shown to recognize viruses such as Influenza A and West Nile Virus and can mediate entry of at least West Nile Virus.

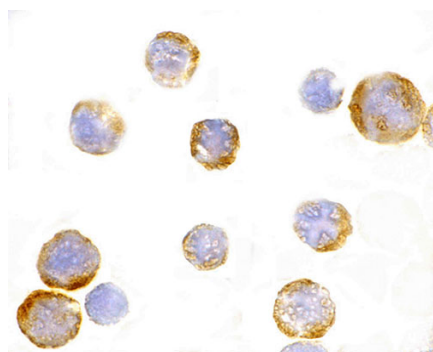
References

Takeda K, Kaisho T, and Akira S. Toll-like receptors. *Annu. Rev. Immunol.* 2003; 21:335-76.
Janeway CA Jr. and Medzhitov R. Innate immune recognition. *Annu. Rev. Immunol.* 2002; 20:197-216.
McGettrick AF and O'Neill LAJ. The expanding family of MyD88-like adaptors in Toll-like receptor signal transduction. *Mol Imm.* 2004; 41:577-82.
Alexopoulou L, Holt AC, Medzhitov R, et al. Recognition of double-stranded RNA and activation of NF- κ B by Toll-like receptor 3. *Nature* 2001; 413:732-8.

Images

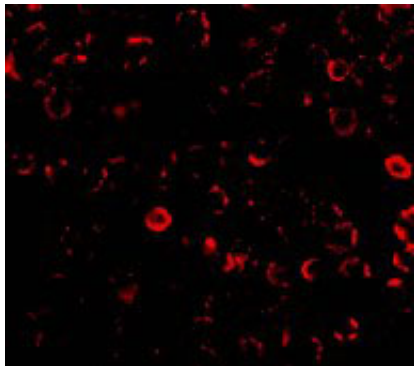


Western blot analysis of TLR3 in Daudi cell lysate with TLR3 antibody at (A) 1 and (B) 2 μ g/mL.



Immunocytochemistry of TLR3 in EL4 cells with TLR3 antibody at 1 μ g/mL.

Immunofluorescence of TLR3 in EL4 cells with TLR3 antibody at 10 μ g/mL.



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