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TLR3 Antibody

Catalog # ASC10371

Product Information

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 0.5 - 2 g/mL. Antibody can also be used for immunocytochemistry starting at 10 g/mL. For immunofluorescence start at 2 g/mL.

Additional Information

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℃ for three months and -20℃, 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

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

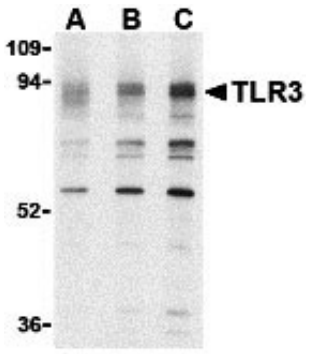
Background

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.

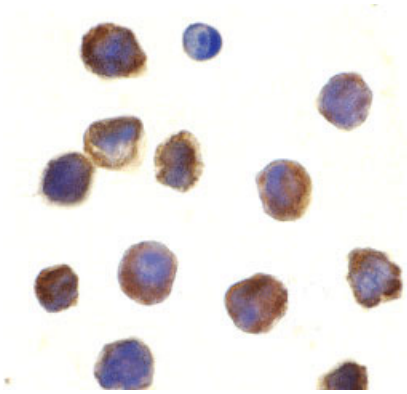
References

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-kappaB by Toll-like receptor 3. Nature 2001; 413:732-8.

Images

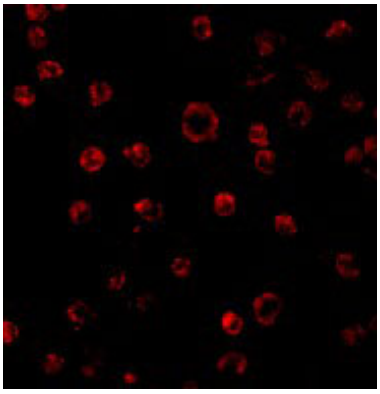


Western blot analysis of TLR3 in K562 cell lysate with TLR3 antibody at (A) 0.5, (B) 1 and (C) 2 µg/mL.



Immunocytochemistry of TLR3 in K562 cells with TLR3 antibody at 10 µg/mL.

Immunofluorescence of TLR3 in K562 cells with TLR3 antibody at 2 µg/mL.



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