

Toll-like receptor 9 (TLR9) (IN). Rabbit Polyclonal Antibody , Human, Mouse, Rat

TLR9 (IN): Toll-like receptor 9, CD289 antigen

BACKGROUND

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 (1,2). TLR9 forms a subfamily along with TLR7 and TLR8 that recognize viral RNA and CpG DNA sequences (3) and are localized in intracellular acidic compartments such as the phagolysosome (4). Unlike other TLRs which act through adaptor molecules such as TOLLIP, TIRAP, TRIF, and MyD88 to activate various kinases and transcription factors to respond to potential infection (5), TLR9 is strictly dependent on MyD88 (3).

ORDERING INFORMATION

CATALOG NUMBER
X1820P

SIZE
100 µg

FORM
Unconjugated

HOST/CLONE
Rabbit

FORMULATION
Provided as solution in phosphate buffered saline with 0.02% sodium azide

CONCENTRATION
0.5 mg/ml

ISOTYPE
IgG

APPLICATIONS
Western Blot, Immunohistochemistry

IMMUNOGEN

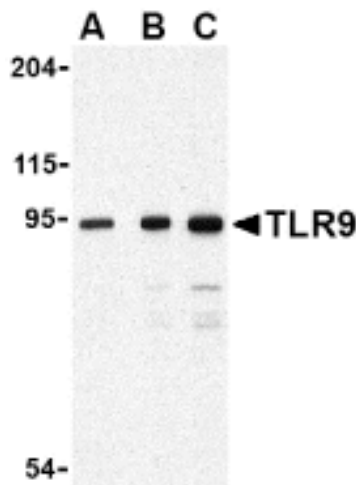
Rabbit polyclonal TLR9 antibody was raised against a peptide corresponding to 15 amino acids near the center of human TLR9.

SPECIES REACTIVITY

Human, Mouse, Rat

Legend:

Western blot analysis of TLR9 in Jurkat cell lysate with TLR9 antibody at (A) 0.5, (B) 1 and (C) 2 µg/ml.



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POSITIVE CONTROL/TISSUE EXPRESSION

Positive Control Jurkat Cell Lysate; Located in the membrane, and highly expressed in spleen, lymph node, tonsil and peripheral blood leukocytes, especially in plasmacytoid pre-dendritic cells. Levels are much lower in monocytes and CD11c+ immature dendritic cells. Also detected in lung and liver.⁶

COMMENTS

TLR9 antibody can be used for detection of TLR9 by Western blot at 0.5 to 1 µg/ml.

SHIP CONDITIONS

Ship at ambient temperature, freeze upon arrival

STORAGE CUSTOMER

Product should be stored at -20°C. Aliquot to avoid freeze/thaw cycles

STABILITY

Products are stable for one year from purchase when stored properly

REFERENCES

- 1.) Takeda K, Kaisho T, and Akira S. Toll-like receptors. *Annu. Rev. Immunol.* 2003; 21:335-76.
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- 3) Wagner H. The immunobiology of the TLR9 subfamily. *Trends Immunol.* 2004; 381-6.
- 4.) Nishiya T and DeFranco AL. Ligand-regulated chimeric receptor approach reveals distinctive subcellular localization and signaling properties of the Toll-like receptors. *J. Biol. Chem.* 2004; 279:19008-17.
- 5) 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
- 6) UniProtKB/Swiss-Prot entry Q9NR96, <http://www.expasy.org/uniprot/Q9NR96>, Accessed February 16, 2007.

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