

## TLR9 (H-100): sc-25468

### BACKGROUND

The toll-like receptors (TLR) are a family of human receptors that share homology with the *Drosophila* toll receptors, which are involved in mediating dorsoventral polarization in developing *Drosophila* embryos and participate in host immunity. The TLR family members are characterized by a highly conserved toll homology (TH) domain, which is essential for toll-induced signal transductions. TLRs are type I transmembrane receptors that contain an extracellular domain consisting of several leucine-rich regions and a single cytoplasmic toll/IL-1R like domain. Three TLR family members, TLR7, TLR8 and TLR9, belong to a subfamily of TLRs, which are differentially expressed. TLR7 is expressed in lung, placenta and spleen. TLR8 is expressed in lung and peripheral blood leukocytes, and TLR9 is predominantly expressed in spleen, lymph nodes, bone marrow and peripheral blood leukocytes. TLR7, TLR8 and TLR9 stimulate the NF $\kappa$ B signaling pathway, suggesting that they play a role in the immune response.

### CHROMOSOMAL LOCATION

Genetic locus: TLR9 (human) mapping to 3p21.2; Tlr9 (mouse) mapping to 9 F1.

### SOURCE

TLR9 (H-100) is a rabbit polyclonal antibody raised against amino acids 771-870 of TLR9 of human origin.

### PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Available as agarose conjugate for immunoprecipitation, sc-25468 AC, 500  $\mu$ g/0.25 ml agarose in 1 ml.

### APPLICATIONS

TLR9 (H-100) is recommended for detection of TLR9 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

TLR9 (H-100) is also recommended for detection of TLR9 in additional species, including canine.

Suitable for use as control antibody for TLR9 siRNA (h): sc-40270, TLR9 siRNA (m): sc-40271, TLR9 shRNA Plasmid (h): sc-40270-SH, TLR9 shRNA Plasmid (m): sc-40271-SH, TLR9 shRNA (h) Lentiviral Particles: sc-40270-V and TLR9 shRNA (m) Lentiviral Particles: sc-40271-V.

Molecular Weight of TLR9: 113 kDa.

Molecular Weight of glycosylated TLR9: 160 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or RAW 309 Cr.1 cell lysate: sc-3814.

### RESEARCH USE

For research use only, not for use in diagnostic procedures.

### SELECT PRODUCT CITATIONS

- Chabot, S., et al. 2006. TLRs regulate the gatekeeping functions of the intestinal follicle-associated epithelium. *J. Immunol.* 176: 4275-4283.
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- Koon, H.W., et al. 2011. Cathelicidin signaling via the Toll-like receptor protects against colitis in mice. *Gastroenterology* 141: 1852-1863, 1863.e1-1863.e3.
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- Ioannidis, I., et al. 2013. Toll-like receptor expression and induction of type I and type III interferons in primary airway epithelial cells. *J. Virol.* 87: 3261-3270.

### STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.


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Try **TLR9 (26C593): sc-52966**, our highly recommended monoclonal alternative to TLR9 (H-100).