

TLR5 (B-24): sc-130897

BACKGROUND

Six human homologs of the *Drosophila* toll receptor were initially identified based on their sequence similarities and designated toll-like receptors (TLR). Toll receptors are involved in mediating dorsoventral polarization in the developing *Drosophila* embryo and also participate in the host immunity. The TLR family of proteins are characterized by a highly conserved toll homology (TH) domain, which is essential for toll-induced signal transduction. TLR1, as well as the other TLR family members, are type I transmembrane receptors that characteristically contain an extracellular domain consisting of several leucine-rich regions along with a single cytoplasmic toll/IL-1R-like domain. TLR2 and TLR4 are activated in response to lipopolysaccharide (LPS) stimulation, which results in the activation and translocation of NFκB and suggests that these receptors are involved in mediating inflammatory responses. TLR5 specifically participates in the innate immune response to microbial agents. TLR5 is highly expressed in ovary and in peripheral blood leukocytes, most abundantly in monocytes and, to a lesser extent, in prostate and testis.

REFERENCES

1. Gay, N.J., et al. 1991. *Drosophila* toll and IL-1 receptor. *Nature* 351: 355-356.
2. Medzhitov, R., et al. 1997. A human homologue of the *Drosophila* toll protein signals activation of adaptive immunity. *Nature* 388: 394-397.
3. Rock, F.L., et al. 1998. A family of human receptors structurally related to *Drosophila* Toll. *Proc. Natl. Acad. Sci. USA* 95: 588-593.
4. Yang, R.B., et al. 1998. Toll-like receptor-2 mediates lipopolysaccharide-induced cellular signalling. *Nature* 395: 284-288.
5. Brightbill, H.D., et al. 1999. Host defense mechanisms triggered by microbial lipoproteins through toll-like receptors. *Science* 285: 732-736.
6. Chow, J.C., et al. 1999. Toll-like receptor-4 mediates lipopolysaccharide-induced signal transduction. *J. Biol. Chem.* 274: 10689-10692.
7. Schwandner, R., et al. 1999. Peptidoglycan- and lipoteichoic acid-induced cell activation is mediated by toll-like receptor 2. *J. Biol. Chem.* 274: 17406-17409.
8. Takeuchi, O., et al. 1999. TLR6: a novel member of an expanding toll-like receptor family. *Gene* 231: 59-65.

CHROMOSOMAL LOCATION

Genetic locus: TLR5 (human) mapping to 1q41; Tlr5 (mouse) mapping to 1 H5.

SOURCE

TLR5 (B-24) is a purified rabbit polyclonal antibody raised against a synthetic N-terminus TLR5 peptide of mouse origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

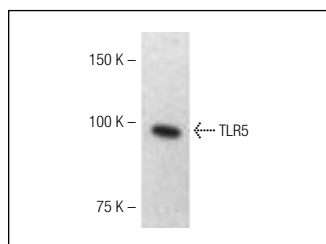
TLR5 (B-24) is recommended for detection of TLR5 of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for TLR5 siRNA (h): sc-40262, TLR5 siRNA (m): sc-40263, TLR5 shRNA Plasmid (h): sc-40262-SH, TLR5 shRNA Plasmid (m): sc-40263-SH, TLR5 shRNA (h) Lentiviral Particles: sc-40262-V and TLR5 shRNA (m) Lentiviral Particles: sc-40263-V.

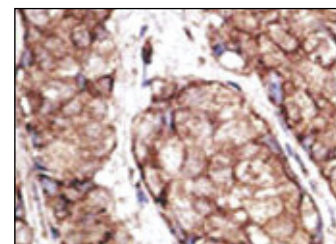
Molecular Weight of TLR5: 110-120 kDa.

Positive Controls: THP-1 cell lysate: sc-2238, HL-60 whole cell lysate: sc-2209 or NAMALWA cell lysate: sc-2234.

DATA



TLR5 (B-24): sc-130897. Western blot analysis of TLR5 expression in HL-60 whole cell lysate.



TLR5 (B-24): sc-130897. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human breast carcinoma tissue showing cytoplasmic and membrane localization.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.


 MONOS
Satisfaction
Guaranteed

Try **TLR5 (19D759.2): sc-57461**, our highly recommended monoclonal alternative to TLR5 (B-24).