

TLR10 (V-20): sc-23577

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 dorso-ventral 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. TLR's 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. TLR6 is highly homologous to TLR1, sharing greater than 65% sequence identity, and, like other members of TLR family, it induces NF κ B signaling upon activation. TLR10 is also most closely related to TLR1 and TLR6, with 50% and 49% overall homology, respectively. TLR10 is predominantly expressed in tissues and cells involved in the immune response, including spleen, lymph node, thymus and tonsil.

REFERENCES

1. Gay, N.J. and Keith, F.J. 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. Brightbill, H.D., et al. 1999. Host defense mechanisms triggered by microbial lipoproteins through toll-like receptors. Science 285: 732-736.
5. Takeuchi, O., et al. 1999. TLR6: A novel member of an expanding toll-like receptor family. Gene 231: 59-65.
6. Chuang T. and Ulevitch R.J. 2001. Identification of hTLR10: a novel human toll-like receptor preferentially expressed in immune cells. Biochem. Biophys. Acta 1518: 157-161.

CHROMOSOMAL LOCATION

Genetic locus: TLR10 (human) mapping to 4p14.

SOURCE

TLR10 (V-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TLR10 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-23577 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

TLR10 (V-20) is recommended for detection of TLR10 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Suitable for use as control antibody for TLR10 siRNA (h): sc-40272, TLR10 shRNA Plasmid (h): sc-40272-SH and TLR10 shRNA (h) Lentiviral Particles: sc-40272-V.

Molecular Weight of TLR10: 90 kDa.

Positive Controls: HL-60 whole cell lysate: sc-2209.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

SELECT PRODUCT CITATIONS

1. Aflatoonian, R., et al. 2007. Menstrual cycle-dependent changes of toll-like receptors in endometrium. Hum. Reprod. 22: 586-593.
2. Aboussahoud, W., et al. 2010. Expression and function of Toll-like receptors in human endometrial epithelial cell lines. J. Reprod. Immunol. 84: 41-51.
3. Chen, G.Y., et al. 2014. Broad and direct interaction between TLR and Siglec families of pattern recognition receptors and its regulation by Neu1. Elife 3: e04066.

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
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Try **TLR10 (2A11): sc-293300**, our highly recommended monoclonal alternative to TLR10 (V-20).