SANTA CRUZ BIOTECHNOLOGY, INC.

TLR10 (H-165): sc-30198

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. 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 that 65% sequence identity, and, like other members of TLR family, it induces NFκB 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., 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. 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., et al. 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 (H-165) is a rabbit polyclonal antibody raised against amino acids 271-435 mapping within an extracellular domain of TLR10 of human origin.

PRODUCT

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

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 or our catalog for detailed protocols and support products.

APPLICATIONS

TLR10 (H-165) is recommended for detection of TLR10 of 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) 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 goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

SELECT PRODUCT CITATIONS

1. 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.

RESEARCH USE

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