

TLR2 (C-19): sc-8690

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 that consists 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 NF κ B and suggests that these receptors are involved in mediating inflammatory responses. Expression of TLR receptors is highest in peripheral blood leukocytes, macrophages and monocytes. TLR6 is highly homologous to TLR1, sharing greater than 65% sequence identity, and, like other members of the TLR family, it induces NF κ B signaling upon activation.

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.

CHROMOSOMAL LOCATION

Genetic locus: TLR2 (human) mapping to 4q31.3.

SOURCE

TLR2 (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of TLR2 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-8690 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.

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.

APPLICATIONS

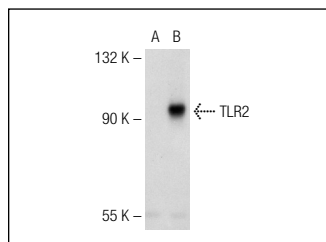
TLR2 (C-19) is recommended for detection of TLR2 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for TLR2 siRNA (h): sc-40256, TLR2 shRNA Plasmid (h): sc-40256-SH and TLR2 shRNA (h) Lentiviral Particles: sc-40256-V.

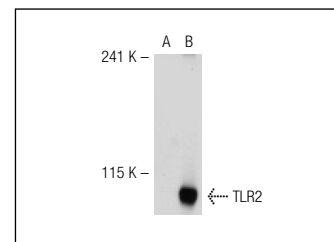
Molecular Weight of TLR2: 90-100 kDa.

Positive Controls: Caco-2 cell lysate: sc-2262, U-937 cell lysate: sc-2239 or TLR2 (h): 293T lysate: sc-115116.

DATA



TLR2 (C-19): sc-8690. Western blot analysis of TLR2 expression in non-transfected: sc-117752 (A) and human TLR2 transfected: sc-115116 (B) 293T whole cell lysates.



TLR2 (C-19): sc-8690. Western blot analysis of TLR2 expression in non-transfected: sc-117752 (A) and human TLR2 transfected: sc-115116 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Farnell, M.B., et al. 2003. Oxidative burst mediated by Toll-like receptors (TLR) and CD14 on avian heterophils stimulated with bacterial Toll agonists. *Dev. Comp. Immunol.* 27: 423-429.
2. Melkamu, T., et al. 2009. Regulation of TLR2 expression and function in human airway epithelial cells. *J. Membr. Biol.* 229: 101-113.
3. Dulay, A.T., et al. 2009. Soluble TLR2 is present in human amniotic fluid and modulates the intraamniotic inflammatory response to infection. *J. Immunol.* 182: 7244-7253.



Try **TLR2 (TL2.1): sc-21759** or **TLR2 (TLR2.3): sc-21760**, our highly recommended monoclonal alternatives to TLR2 (C-19). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **TLR2 (TL2.1): sc-21759**.