

Anti-TLR4/CD284

Catalog# SPC-200D

Size: 100µg

This product is for *in vitro* research use only and is not intended for use in humans or animals

Product	Rabbit TLR4/CD284 polyclonal Antibody
Clone	N/A
Immunogen	Developed against a synthetic peptide corresponding to amino acids 420-435 of human TLR4.
Host and Subclass	Rabbit, IgG
Cited Applications	Flow, IHC, ICC, WB
Specificity	Detects ~75-80kDa when tested against partial recombinant mouse TLR4 (extracellular portion plus His-tag)
Species Cross-reactivity	Human, Mouse
Format	Affinity purified, formatted in PBS containing 0.05% BSA and 0.05% sodium azide
Concentration and working dilution	1.0mg/mL; 1-3ug/mL for Western blot, 1:50 for IHC
Storage and stability	-20°C; 1 year+; shipped on cold packs or ambient

Scientific Background

The Toll-like receptor (TLR) family in mammal comprises a family of trans-membrane proteins characterized by multiple copies of leucine rich repeats in the extracellular domain and 1L-1 receptor motif in the cytoplasmic domain. Like its counterparts in *Drosophila*, TLRs signal through adaptor molecules (1). The TLR family is a phylogenetically conserved mediator of innate immunity that is essential for microbial recognition (2). Ten human homologs of TLRs (TLR1-10) have been described (3). Among this family of receptors, TLR2 and TLR4 have been

most studied. These studies have suggested that TLR2 and TLR4 may serve as potential main mediators of LPS signaling (4,5). The mouse TLR4 cDNA codes for a protein consisting of 839 amino acids, with an approximate molecular weight of 90kDa (6).

Selected References

1. JMuzio M., Natoli G., Sacchan S., Levrero M., and Mantovani A. (1998) *J. Exp. Med.* 187: 2097-2101.
2. Medzhitov R. and Janeway C.A (1997). *Cell* 91: 295-298.
3. Chuang T.H. and Ulevitch R.J. (2001) *Biochim. Biophys. Acta* 1518 (1-2): 157-161.
4. Takeuchi O., *et al.* (1999) *Immunity* 11: 443.
5. Poltorak A., Riccardi-Castagnoli P., Citterio S., and Butler B. (2000) *Proc. Natl. Acad. Sci USA* 97: 2163-2167.
6. Medzhitov R., Preston-Hurlburt P. and Janeway C.A. (1997) *Nature* 388 (6640): 394-397.

Certificate of Analysis

2 µg/mL of SPC-200 was sufficient for detection of TLR4 in 100ng of partial recombinant mouse TLR4 protein by colorimetric immunoblot analysis using Goat anti-rabbit IgG:HRP as the secondary antibody.

Material Safety Data Sheet

Anti-TLR4/CD284 (Polyclonal) SPC-200

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The below information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. StressMarq shall not be held liable for any damage resulting from handling or from contact with the above product. See the Technical Specification, Packing Slip, Invoice, and Product Catalogue for additional terms and conditions of sale.

Hazardous Ingredients

The physical, chemical and toxicological properties of these components have not been fully investigated. It is recommended that all laboratory personnel follow standard laboratory safety procedures when handling this product. Safety procedures should include wearing OSHA approved safety glasses, gloves and protective clothing. Direct physical contact with this product should be avoided.

<u>Known Hazardous Components</u>	<u>CAS Number</u>	<u>Percent</u>
Sodium Azide	26628-22-8	0.05

Physical Data

This product consists of rabbit immunoglobulin in PBS buffer containing 0.05% BSA and 0.05% sodium azide shipped on gel packs. The physical properties of this product have not been investigated thoroughly.

Fire and Explosion Hazard and Reactivity Data

NOT APPLICABLE

Toxicological Properties

May be harmful by inhalation, ingestion, or skin absorption. The toxicological properties of this product have not been investigated thoroughly. Exercise due caution.

Preventative Measures

Wear chemical safety goggles and compatible chemical-resistant gloves. Avoid inhalation, contact with eyes, skin or clothing.

Spill and Leak Procedures

Observe all federal, state and local environmental regulations.

- Wear protective equipment.
- Absorb on sand or vermiculite and place in closed containers for disposal.
- Dispose or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

First Aid Measures

- If swallowed, wash out mouth with water, provided person is conscious. Call a physician.
- In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. If a rash or other irritation develops, call a physician.
- If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.
- In case of eye contact, flush with copious amounts of water for at least 15 minutes while separating the eyelids with fingers. Call a physician.