

## Monoclonal Antibody to CD289 / TLR9 (Isoform A, 268-284) - Alexa Fluor 488

<b>Alternate names:</b>	Toll-like receptor 9, UNQ5798/PRO19605
<b>Catalog No.:</b>	SM7105AF488
<b>Quantity:</b>	0.1 mg
<b>Concentration:</b>	0.5 mg/ml
<b>Background:</b>	<p>The Toll-like receptor (TLR) family in mammal comprises a family of transmembrane proteins characterized by multiple copies of leucine rich repeats in the extracellular domain and IL-1 receptor motif in the cytoplasmic domain. Like its counterparts in <i>Drosophila</i>, 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). By using a BLAST search, Hemmi et al., 2000 (5) have identified and subsequently isolated a cDNA coding for TLR9. Gene knockout experiments suggest that TLR9 acts as a receptor for unmethylated CpG dinucleotides in the bacterial DNA (4). Human and mouse TLR9 share an overall amino-acid identity of 75.5%. TLR9 is highly expressed in spleen.</p>
<b>Uniprot ID:</b>	<a href="#">O9NR96</a>
<b>NCBI:</b>	<a href="#">NP_059138.1</a>
<b>GeneID:</b>	<a href="#">54106</a>
<b>Host / Isotype:</b>	Mouse / IgG1
<b>Clone:</b>	26C593.2
<b>Immunogen:</b>	<p>KLH-conjugated synthetic peptide corresponding to amino acids 268-284 of human TLR9 isoform A</p> <p><b>AA Sequence:</b> CPRHFPQLHPDTFSHLS</p>
<b>Format:</b>	<p><b>State:</b> Liquid Ig fraction <b>Purification:</b> Protein G chromatography <b>Buffer System:</b> PBS containing 0.05% BSA and 0.05% sodium azide <b>Label:</b> Alexa Fluor 488 – Alexa Fluor® 488</p>
<b>Applications:</b>	<p>Flow cytometry (Intracellular): 0.5-1.0 µg/10e6 cells Flow cytometry (Cell surface). Immunofluorescence/Immunocytochemistry. Confocal microscopy. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.</p>
<b>Specificity:</b>	This antibody detects CD289 / TLR9, Isoform A.

**Species Reactivity:** Tested: Dog, Horse, Human, Mouse, Rat, Rhesus Monkey

**Storage:** Store the antibody at 2 - 8 °C. DO NOT FREEZE! This product is photosensitive and should be protected from light.  
Shelf life: six months from despatch

**General Readings:**

1. Muzio M, Natoli G, Saccani S, Levrero M, and Mantovani A. J. exp. Med. 187: 2097-2101 (1998).
2. Medzhitov R and Janeway CA. Cell 91: 295-298 (1997).
3. Chuang TH and Ulevitch RJ. Biochim. Biophys. Acta 1518 (1-2):157-161 (2001)
4. Takeuchi O, Kawai T, Sanjo H, Copeland NG, Gilbert DJ, Jenkins NA, et al. TLR6: A novel member of an expanding toll-like receptor family. Gene. 1999 Apr 29;231(1-2):59-65. PubMed PMID: 10231569.
5. Hemmi H, Takeuchi O, Kawai T, Kaisho T, Sato S, Sanjo H, Matsumoto M, Hoshino K, Wagner H, Takeda K, and Shizo A. Nature 408: 740-745 (2000).

**Pictures:** Intracellular flow analysis of TLR9 in Ramos cells using 0.5 µg of SM7105AF488. Shaded histogram represents Ramos cells without antibody; green represents isotype control; red represents anti-TLR9 antibody.

