

Polyclonal Antibody to CD290 / TLR10 - Ig Fraction

Alternate names:	Toll-Like Receptor 10
Catalog No.:	AP09156PU-N
Quantity:	0.1 mg
Concentration:	1.0 mg/ml (by UV absorbance at 280 nm)
Background:	Toll-like receptors (TLRs) are signaling molecules that recognize different microbial products during infection and serve as an important link between the innate and adaptive immune responses. These proteins act through adaptor molecules such as MyD88 and TIRAP to activate various kinases and transcription factors. TLR10 is highly homologous to TLRs 1 and 6 and is most highly expressed in lymphoid tissues. Most recently genetic variation in TLR10 has been associated with contributing to asthma risk. It should be noted that TLR10 exists in mice only as a pseudogene.
Uniprot ID:	Q32MI7
NCBI:	9606
Host / Isotype:	Rabbit / IgG
Immunogen:	Synthetic peptide corresponding to an internal region of human toll-like receptor 10 protein
Format:	State: Liquid IgG fraction Buffer System: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 containing 0.02% (w/v) Sodium Azide as preservative
Applications:	ELISA: 1/10000 - 1/40000. Western Blot: 0.5 -2 µg/ml. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This IgG fraction antibody is directed against TLR10 protein. Species: Human. Other species not tested.
Storage:	Store the antibody at -20°C. Avoid repeated freezing and thawing. Shelf life: one year from despatch.
General Readings:	1. Vogel SN, Fitzgerald KA, Fenton MJ. TLRs: differential adapter utilization by toll-like receptors mediates TLR-specific patterns of gene expression. <i>Mol Interv.</i> 2003 Dec;3(8):466-77. PubMed PMID: 14993454. 2. Takeda K, Kaisho T, and Akira S. Toll-like receptors. <i>Annu. Rev. Immunol.</i> 2003; 21:335-76. 3. Janeway CA Jr. and Medzhitov R. Innate immune recognition. <i>Annu. Rev. Immunol.</i> 2002; 20:197-216. 4. O'Neill LA, Fitzgerald KA, Bowie AG. The Toll-IL-1 receptor adaptor family grows to five

- members. Trends Immunol. 2003 Jun;24(6):286-90. PubMed PMID: 12810098.
5. McGettrick AF, O'Neill LA. The expanding family of MyD88-like adaptors in Toll-like receptor signal transduction. Mol Immunol. 2004 Jul;41(6-7):577-82. PubMed PMID: 15219996.
6. Chuang T, Ulevitch RJ. Identification of hTLR10: a novel human Toll-like receptor preferentially expressed in immune cells. Biochim Biophys Acta. 2001 Mar 19;1518(1-2):157-61. PubMed PMID: 11267672.
7. Lazarus R, Raby BA, Lange C, Silverman EK, Kwiatkowski DJ, Vercelli D, et al. TOLL-like receptor 10 genetic variation is associated with asthma in two independent samples. Am J Respir Crit Care Med. 2004 Sep 15;170(6):594-600. Epub 2004 Jun 16. PubMed PMID: 15201134.
8. Beutler B, Rehli M. Evolution of the TIR, tolls and TLRs: functional inferences from computational biology. Curr Top Microbiol Immunol. 2002;270:1-21. PubMed PMID: 12467241.

Pictures:

Western blot using IgG fraction of anti-TLR10 antibody shows detection of a predominant band at ~75 kDa corresponding to TLR10 (arrowhead) in human lymph node whole cell lysate. The predicted MW of TLR10 is 95 kDa. TLR10 was detected using 0.5 µg/ml (lane A) and 1.0 µg/ml (lane B) concentrations of primary antibody.

