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Anti-TLR8 Antibody

Catalog # ABO12752

Product Information

Application	WB
Primary Accession	Q9NR97
Host	Rabbit
Reactivity	Human, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Toll-like receptor 8(TLR8) detection. Tested with WB in Human;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	51311
Other Names	Toll-like receptor 8, CD288, TLR8
Calculated MW	119828
Application Details	Western blot, 0.1-0.5 □g/ml, Human, Rat
Subcellular Localization	Membrane ; Single-pass type I membrane protein .
Tissue Specificity	Detected in brain, heart, lung, liver, placenta, in monocytes, and at lower levels in CD11c+ immature dendritic cells.
Source	Eukaryota
Protein Name	Toll-like receptor 8
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human TLR8 (881-907aa DAYISYDTKDASVTDWVINELRYHLEE), identical to the related mouse sequence.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities	Belongs to the Toll-like receptor family.

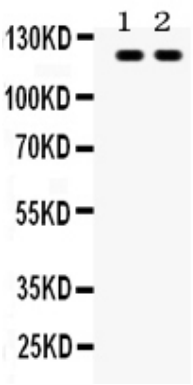
Protein Information

Name	TLR8 (HGNC:15632)
Function	Endosomal receptor that plays a key role in innate and adaptive immunity (PubMed:25297876, PubMed:32433612). Controls host immune response against pathogens through recognition of RNA degradation products specific to microorganisms that are initially processed by RNASET2 (PubMed:31778653). Recognizes GU-rich single- stranded RNA (GU-rich RNA) derived from SARS-CoV-2, SARS-CoV-1 and HIV- 1 viruses (PubMed:33718825). Upon binding to agonists, undergoes dimerization that brings TIR domains from the two molecules into direct contact, leading to the recruitment of TIR-containing downstream adapter MYD88 through homotypic interaction (PubMed:23520111, PubMed:25599397, PubMed:26929371, PubMed:33718825). In turn, the Myddosome signaling complex is formed involving IRAK4, IRAK1, TRAF6, TRAF3 leading to activation of downstream transcription factors NF- kappa-B and IRF7 to induce pro-inflammatory cytokines and interferons, respectively (PubMed:16737960, PubMed:17932028, PubMed:29155428).
Cellular Location	Endosome membrane; Single-pass type I membrane protein. Note=Endosomal localization confers distinctive proteolytic processing
Tissue Location	Expressed in myeloid dendritic cells, monocytes, and monocyte-derived dendritic cells.

Background

TLR8 (Toll-like receptor 8) is a protein that in humans is encoded by the TLR8 gene. TLR8 has also been designated as CD288 (cluster of differentiation 288).The TLR8 gene is mapped to Xp22.3-p22.2 by Chuang and Ulevitch (2000) and Du et al. (2000). The protein encoded by this gene is a member of the Toll-like receptor (TLR) family which plays a fundamental role in pathogen recognition and activation of innate immunity. TLRs are highly conserved from Drosophila to humans and share structural and functional similarities. They recognize pathogen-associated molecular patterns (PAMPs) that are expressed on infectious agents, and mediate the production of cytokines necessary for the development of effective immunity. The various TLRs exhibit different patterns of expression. This gene is predominantly expressed in lung and peripheral blood leukocytes, and lies in close proximity to another family member, TLR7, on chromosome X. TLR8 recognises G-rich oligonucleotides.

Images



Anti- TLR8 antibody, ABO12752, Western blottingAll lanes: Anti TLR8 (ABO12752) at 0.5ug/mlLane 1: Rat Liver Tissue Lysate at 50ugLane 2: HEPG2 Whole Cell Lysate at 40ugPredicted bind size: 120KDObserved bind size: 120KD

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.