

TLR8 (TAntibody (Clone 44B05)

Mouse Monoclonal Antibody Catalog # ABV10409

Specification

TLR8 (TAntibody (Clone 44B05) - Product Information

Application WB, FC **Primary Accession 09NR97** NP 619542 Other Accession Reactivity Human Host Mouse Clonality Monoclonal Isotype Mouse IgG1 Calculated MW 119828

TLR8 (TAntibody (Clone 44B05) - Additional Information

Gene ID 51311

Application & Usage Western blotting (1:200-1000 dilutions)

and FACS analysis. Ramos cell lysate can be used as a positive control and a 120 kDa band is detected in Western blotting. For FACS analysis, we recommend 1-4 ml per million cells. However, the optimal conditions should be determined

individually.

Other Names

LR8, Anti-TLR8, CD288, CD288, MGC119599, # MGC119600

Target/Specificity

TLR8

Antibody Form

Liquid

Appearance

Colorless liquid

Formulation

 $100~\mu$ l (1 mg/ml) Protein G purified mouse anti-TLR8 monoclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 50% glycerol, 1% BSA, 0.02% thimerosal.

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C

Background Descriptions



Precautions

TLR8 (TAntibody (Clone 44B05) is for research use only and not for use in diagnostic or therapeutic procedures.

TLR8 (TAntibody (Clone 44B05) - Protein Information

Name TLR8 (<u>HGNC:15632</u>)

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.

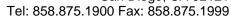
TLR8 (TAntibody (Clone 44B05) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

TLR8 (TAntibody (Clone 44B05) - Images







TLR8 (TAntibody (Clone 44B05) - Background

The Toll-like receptor (TLR) family of proteins are characterized by a highly conserved Toll homology (TH) domain, which is essential for Toll-induced signal transduction. TLR1 contains an extracellular domain consisting of several leucine-rich regions along with a single cytoplasmic Toll/IL-1R-like domain. TLR2 and TLR4 are activated in response to lipopolysacchride (LPS) stimulation, which results in the activation and translocation of NFkB and s µggests that these receptors are involved in mediating inflammatory responses. TLR6 is highly homologous to TLR1, and like other members of TLR family, it induces NFkB signaling upon activation. TLR8 gene contains three exons, two of which have coding function. Expression of TLR receptors is highest in peripheral blood leukocytes, macrophages, and monocytes.