

TLR2 (CD282) Monoclonal Antibody

catalog number: AN200091P

Note: Centrifuge before opening to ensure complete recovery of vial contents.

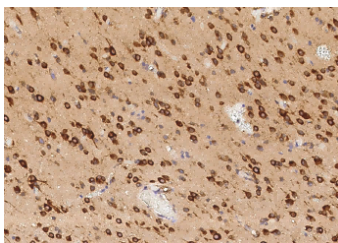
Description

Reactivity	Human
Immunogen	Recombinant Human TLR2 (CD282) Protein
Host	Mouse
Isotype	IgG1
Clone	7B4
Purification	Protein A
Buffer	0.2 µm filtered solution in PBS

Applications Recommended Dilution

IHC-P	1:50-1:200
--------------	------------

Data



Immunohistochemistry of paraffin-embedded human brain using TLR2 (CD282) Monoclonal Antibody at dilution of 1:60.

Preparation & Storage

Storage	This antibody can be stored at 2°C-8°C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20°C to -80°C. Preservative-Free. Avoid repeated freeze-thaw cycles.
Shipping	Ice bag

Background

For Research Use Only

Human toll-like receptor (TLR) family includes ten members that activate the innate immune response via an ability to recognize molecular structures found in a variety of microbial pathogens. All TLR family members are type I transmembrane proteins with a large number of extracellular leucine-rich repeats (LRRs) and a cytoplasmic Toll/IL-1 receptor (TIR) domain. Human TLR2 is synthesized as a 784 amino acid (aa) precursor that contains a signal sequence (aa 1-18), an extracellular domain (aa 19-588) with approximately 20 LRRs, a transmembrane segment (aa 589-609), and a cytoplasmic TIR domain (aa 610-784). The receptor is expressed on a number of cell types including monocytes, dendritic cells, neutrophils, B cells endothelial cells, and hepatocytes. TLR2 functions as part of a heterodimeric complex with either TLR1 or TLR6, and possibly other co-receptors. These complexes recognize lipoproteins and glycolipids from gram-positive and gram-negative bacteria as well as mycoplasma and yeast. TLR2/TLR1 heterodimers bind triacylated lipopeptides, while the TLR2/TLR6 heterodimer preferentially recognizes diacylated lipopeptides. Upon ligand recognition, TLR2 delivers an activating signal via the associated adapter molecules, MyD88 and TIRAP. TLR2 signaling results in dendritic cell maturation characterized by increased surface expression of class II MHC and the T cell costimulators, CD80 and CD86. Activation via TLR2 also results in production of a number of pro-inflammatory cytokines including TNF-alpha, IL-2, IL-6, IL-12, and MIP-2.