



# Mouse Anti-Mouse TLR4 (CD284) monoclonal antibody, clone VU52 (CABT-L6058)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Immunogen</b>	This monoclonal antibody was generated against BaF3 cells overexpressing mouse TLR4
<b>Isotype</b>	IgG1, κ
<b>Source/Host</b>	Mouse
<b>Species Reactivity</b>	Human, Mouse
<b>Clone</b>	VU52
<b>Purification</b>	Affinity purified. Purity: Greater than 90%, as determined by SDS-PAGE.
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	WB, IHC, ICC/IF, FC, FuncS Each laboratory should determine an optimum working titer for use in its particular application. Other applications have not been tested but use in such assays should not necessarily be excluded.
<b>Format</b>	Liquid, Purified
<b>Size</b>	25 µg; 2 mg
<b>Buffer</b>	PBS, pH 7.2 with 0.09% sodium azide
<b>Preservative</b>	0.09% sodium azide
<b>Storage</b>	Store at 2-8°C.
<b>Ship</b>	Wet ice

# BACKGROUND

## Introduction

TLR4 is 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. This receptor is most abundantly expressed in placenta, and in myelomonocytic subpopulation of the leukocytes. Mammalian cells respond to LPS by activating TLR4. TLR4 belongs to the multi-protein complex of lipopolysaccharide (LPS) receptor, containing CD14, LY96 and TLR4, and is involved in signal transduction events induced by lipopolysaccharide (LPS) found in most gram-negative bacteria. TLR4 aids in the recognition of 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. Mutations in the TLR4 gene have been associated with differences in LPS responsiveness. Also, several transcript variants of the TLR4 gene have been found, but the protein coding potential of most of them is uncertain. TLR4 is expressed by peripheral blood monocytes and a small population of B-cells and is also expressed in human placenta. Studies with TLR4-deficient mice indicate that the main ligand for TLR is lipopolysaccharide. Consequently, these mice also showed increased susceptibility to Gram-negative sepsis.

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## Keywords

CD284; TLR4

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