

Product Information

MemDX™ Membrane Protein Human TLR4 (Toll like receptor 4) expressed in *In vitro* wheat germ expression system for Antibody Discovery

Cat. No.: **MP1369X**

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

This product is a 99.7 kDa Human TLR4 membrane protein expressed in *In vitro* wheat germ expression system. The protein is for research use only and is not approved for use in humans or in clinical diagnosis.

Product Specifications

Host Species

Human

Target Protein

TLR4

Protein Length

Full-length

Molecular Weight

99.7 kDa

TMD

1

Sequence

MPLLNLSLDLSLNPMNFIQPGAFKEIRLHKLTLRNNFDSLNVMKTCIQGLAGLEVHRLVLGEFRNEGNEKFDKSALEGLCNLTIEFF

Product Description

Application

Enzyme-linked Immunoabsorbent Assay, Western Blot (Recombinant protein), Antibody Production, Protein Array

Expression Systems

in vitro wheat germ expression system

Tag

GST-tag at N-terminal

Protein Format

Liposome

Form

Liquid

Purification

Glutathione Sepharose 4 Fast Flow

Buffer

50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0

Storage

Store at +4°C for up to one week or several months at -80°C

Target

Target Protein

TLR4

Full Name

Toll like receptor 4

Introduction

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 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. *In silico* studies have found a particularly strong binding of surface TLR4 with the spike protein of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the causative agent of Coronavirus disease-2019 (COVID-19). This receptor has also been implicated in signal transduction events induced by lipopolysaccharide (LPS) found in most gram-negative bacteria. Mutations in this gene have been associated with differences in LPS responsiveness, and with susceptibility to age-related macular degeneration. Multiple transcript variants encoding different isoforms have been found for this gene.

Alternative Names

TOLL; CD284; TLR-4; ARMD10; toll-like receptor 4; hToll; homolog of *Drosophila* toll; toll like receptor 4 protein

Gene ID

[7099](#)

UniProt ID

[Q00206](#)