

# **Product Information**

# MemDX™ Membrane Protein Human TLR4 (Toll like receptor 4) Full Length

Cat. No.: MPC1515K

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

This product is a 95.6 kDa Human TLR4 membrane protein expressed in HEK293. 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

# **Protein Class**

Receptor; Immunity

# **Molecular Weight**

95.6 kDa

#### **TMD**

1

### Sequence

MMSASRLAGTLIPAMAFLSCVRPESWEPCVEVVPNITYQCMELNFYKIPD NLPFSTKNLDLSFNPLRHLGSYSFFSFPELQVLDLSRCEIQTIEDGAYQS LSHLSTLILTGNPIQSLALGAFSGLSSLQKLVAVETNLASLENFPIGHLK TLKELNVAHNLIQSFKLPEYFSNLTNLEHLDLSSNKIQSIYCTDLRVLHQ MPLLNLSLDLSLNPMNFIQPGAFKEIRLHKLTLRNNFDSLNVMKTCIQGL AGLEVHRLVLGEFRNEGNLEKFDKSALEGLCNLTIEEFRLAYLDYYLDDI IDLFNCLTNVSSFSLVSVTIERVKDFSYNFGWQHLELVNCKFGQFPTLKL KSLKRLTFTSNKGGNAFSEVDLPSLEFLDLSRNGLSFKGCCSQSDFGTTS LKYLDLSFNGVITMSSNFLGLEQLEHLDFQHSNLKQMSEFSVFLSLRNLI YLDISHTHTRVAFNGIFNGLSSLEVLKMAGNSFQENFLPDIFTELRNLTF LDLSQCQLEQLSPTAFNSLSSLQVLNMSHNNFFSLDTFPYKCLNSLQVLD YSLNHIMTSKKQELQHFPSSLAFLNLTQNDFACTCEHQSFLQWIKDQRQL LVEVERMECATPSDKQGMPVLSLNITCQMNKTIIGVSVLSVLVVSVVAVL VYKFYFHLMLLAGCIKYGRGENIYDAFVIYSSQDEDWVRNELVKNLEEGV PPFQLCLHYRDFIPGVAIAANIIHEGFHKSRKVIVVVSQHFIQSRWCIFE YEIAQTWQFLSSRAGIIFIVLQKVEKTLLRQQVELYRLLSRNTYLEWEDS VLGRHIFWRRLRKALLDGKSWNPEGTVGTGCNWQEATSI

# **Product Description**

## **Expression Systems**

**HEK293** 

#### Tag

Based on specific requirements

#### **Protein Format**

Detergent or based on specific requirements

#### **Form**

Liquid

# Storage

Aliquot and store at -20°C or lower. For long term storage, we recommend to store at -70°C or lower. Avoid freeze/thaw cycles.

## **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**

TLR4; TOLL; CD284; TLR-4; ARMD10; hToll; homolog of Drosophila toll; toll like receptor 4 protein; toll-like receptor 4; Toll like receptor 4

## Gene ID

<u>7</u>099

## **UniProt ID**

O00206