

TECHNICAL DATA SHEET

Recombinant Human TLR-4 (Carrier-free)

Catalog Number: 21-9232

RPx-Pro™ Recombinant Protein
PRODUCT INFORMATION

CONTENTS

Recombinant Human TLR-4 (Carrier-free)

DESCRIPTION

TLR4 is a 100 kDa type I transmembrane glycoprotein member of the toll-like receptor (TLR) family that plays a fundamental role in pathogen recognition and activation of innate immunity. Mature TLR4 protein contains 21 leucine rich repeats in its extracellular domain and one cytoplasmic Toll/IL-1 receptor (TIR) domain. TLRs are pathogen pattern recognition molecules and TLR4 primarily functions as a receptor for bacterial endotoxin/lipopolysaccharide (LPS), the major cell wall component of gram-negative bacteria. TLR4 cooperates with LY96 (also referred as MD-2) and CD14 to mediate in downstream signal transduction events that promote tissue inflammation. Recombinant Human TLR-4 is a 69.3 kDa glycoprotein containing 609 amino acid residues of the TLR-4 extracellular domain. As a result of glycosylation, Recombinant Human TLR-4 migrates with an apparent molecular mass of approximately 90-100 kDa by SDS-PAGE gel, under reducing and non-reducing conditions.

MOLECULAR MASS

69.3 kDa

AMINO ACID SEQUENCE

ESWEPCEVEV PNITYQCMEL NFYKIPDNLP FSTKNLDLSF NPLRHLGYSY FFSFPELQVL DLSRCEIQTI EDGAYQSLSH LSTLILGTP IQSLALGAFS
 GLSSLQKLVA VETNLASLEN FPIGHLKTLK ELNVAHNLIQ SFKLPPEYFSN LTNLEHLDLS SNKIQSIYCT DLRVLHQMPL LNLSLDLSLN PMNFIQPGAF
 KEIRLHLKTL RNNFDSLNV KTCIQGLAGL EVHRLVLGEF RNEGNLEKFD KSALEGLCNL TIEEFRLAYL DYYLDDIIDL FNCLTNVSSF SLVSVTIERV
 KDFSYNFGWQ HLELVNCKFG QFPTLKLKSL KRLTFTSNKG GNAFSEVDLP SLEFLDLSRN GLSFKGCCSQ SDFGTTSLKY LDLSFNNGVIT MSSNFLGLEQ
 LEHLDFQHSN LKQMSEFSVF LSLRNLIIYLD ISHTHTRVAF NGIFNGLSSL EVLKMAGNSF QENFLPDIFT ELRNLTFDL SQCQLEQLSP TAFNSLSSLQ
 VLNMSHNNFF SLDTFPYKCL NSLQVLDYSL NHIMTSKKQE LQHFPSSLAF LNLTQNDFAC TCEHQSFQW IKDQRQLLVE VERMECATPS DKQGMPVLSL
 NITCQMNT

SOURCE

HEK293

APPLICATIONS

Bioassay

PURITY

95 %

STORAGE

-20°C

PROTEIN CONTENT

Content Verified by UV Spectroscopy and/or SDS-PAGE gel.

ENDOTOXIN LEVEL

Endotoxin level is <0.1 ng/µg of protein (<1 EU/µg).

AUTHENTICITY

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

CROSS REACTIVITY

N/A

BIOACTIVITY

Determined by its ability to bind rhMD-2 in a functional ELISA.

RESEARCH AREAS

Angiogenesis/Cardiovascular, Allergy, Apoptosis, Cancer, Diabetes/Weight Regulation, Immune System, Inflammation, Proliferation, Receptors

RECONSTITUTION

See Certificate of Analysis (COA) for lot specific reconstitution information.

REFERENCES

Citations are provided as a resource for additional applications that have not been validated by Tonbo Biosciences. Please choose the appropriate format for each application and consult Materials and Methods sections for additional details about the use of any product in these publications.

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