BioVision 9/13 For research use only

TLR-3, Human CellExp™, Human Recombinant

CATALOG #: 7220-10 10 μg 7220-50 50 μg

ALTERNATE NAMES: Toll-like receptor 3; CD283 antigen

SOURCE: HEK 293 cells

PURITY: ≥ 95% by SDS-PAGE gel and HPLC analyses

MOL. WEIGHT: 77.4 kDa

ENDOTOXIN LEVEL: $< 0.1 \text{ ng/}\mu\text{g}$ of protein (<1 EU/ μ g).

FORM: Lyophilized

FORMULATION: Sterile filtered through a 0.2 micron filter.

Lyophilized from 20 mM Sodium Phosphate, pH

7.5.

STORAGE CONDITIONS: Store at -20°C. After reconstitution, aliquot and

store at -20°C to -80°C. Avoid repeated freezing

and thawing cycles.

RECONSTITUTION:

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

DESCRIPTION:

TLR-3 is a single-pass type I receptor that binds to and signals the presence of microbial pathogens and double stranded RNA (dsRNA) viruses. Signaling through TLR-3 can promote the NF-B pathway to initiate innate and adaptive immune responses to bacterial and viral infections, as well as the p53 pathway to trigger apoptosis in cells infected with dsRNA viruses. TLR-3 belongs to a family of structurally-related toll-like receptors (TLRs) containing an N-terminal domain rich in leucine repeats and a C-terminal intracellular

Toll/interleukin (IL)-1 (TIL) domain. TLR-3 is expressed primarily in dendritic cells of the placenta and pancreas where it can reside on both sides of the plasma membrane and in the endosomal compartment of the cells. Recombinant human TLR-3 is 77.4 kDa glycoprotein containing 681 residues which comprise the TLR-3 extracellular domain.

AMINO ACID SEQUENCE:

STTKCTVSHE **QVPDDLPTNI TVLNLTHNQL** RRLPAANFTR VADCSHLKLT YSQLTSLDVG FNTISKLEPE LCQKLPMLKV LNLQHNELSQ **LSDKTFAFCT** NLTELHLMSN SIQKIKNNPF VKQKNLITLD LSHNGLSSTK LGTQVQLENL QELLLSNNKI QALKSEELDI FANSSLKKLE LSSNQIKEFS PGCFHAIGRL FGLFLNNVQL GPSLTEKLCL ELANTSIRNL SLSNSQLSTT SNTTFLGLKW TNLTMLDLSY **NNLNVVGNDS** FAWLPQLEYF FLEYNNIQHL **FSHSLHGLFN** VRYLNLKRSF **TKQSISLASL** PKIDDFSFQW LKCLEHLNME DNDIPGIKSN MFTGLINLKY LSLSNSFTSL RTLTNETFVS LAHSPLHILN LTKNKISKIE SDAFSWLGHL **EVLDLGLNEI** GQELTGQEWR GLENIFEIYL SYNKYLQLTR NSFALVPSLQ RLMLRRVALK NVDSSPSPFQ PLRNLTILDL SNNNIANIND **DMLEGLEKLE ILDLQHNNLA** RLWKHANPGG PIYFLKGLSH LHILNLESNG FDEIPVEVFK DLFELKIIDL GLNNLNTLPA SVFNNQVSLK SLNLQKNLIT SVEKKVFGPA FRNLTELDMR **FNPFDCTCES** IAWFVNWINE THTNIPELSS HYLCNTPPHY HGFPVRLFDT SSCKDSAPFE L

BIOLOGICAL ACTIVITY:

Determined by its ability to inhibit IL-8 secretion induced by Poly I:C in the TLR3 receptorexpressing HEK293 cells (HEK293 TLR3r). The ED₅₀ for this effect is \leq 30 µg/ml in the presence of 100 µg/ml of Poly I:C.

RELATED PRODUCTS:

- TLR3 Antibody (Cat. No. 3445R-100)
- TLR3 Blocking Peptide (Cat. No. 3445RBP-50)
- TLR3 Antibody (Clone BV31-9) (Cat. No. 3445-100)
- TLR1 Antibody (Cat. No. 3446-100)
- TLR10 Antibody (Cat. No. 3932-100)
- TLR11 Antibody (Cat. No. 3931-100)
- TLR2 Antibody (Cat. No. 3552-100)
- TLR2 Antibody (Clone BV31-9) (Cat. No. 3569-100)
- TLR4 Antibody (Cat. No. 3253-100)
- TLR5 Antibody (Cat. No. 3555-100)
- TLR5 Antibody (Cat. No. 3555R-100)
- TLR7 Antibody (Cat. No. 3557-100)
- TLR8 Antibody (Cat. No. 3558R-100)
- TLR9 Antibody (Cat. No. 3559R-100)

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