

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 ng/µg of protein (<1 EU/µg).

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- κ 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 VADCSHLKLT QVPDDLPTNI TVLNLTHNQL RRLPAANFTR
 YSQLTSLDVG FNTISKLEPE LCQKLPMLKV LNLQHNELSQ LSDKTFACF
 NLTELHLMSN SIQKIKNNPF VKQKNLITLD LSHNGLSSTK LGTQVQLENL QELLSNNKI
 QALKSEELDI FANSSLKKE LSSNQIKEFS PGCFHAIGRL FGLFLNNVQL GPSLTKLCL
 ELANTSIRNL SLSNSQLSTT SNTTFLGLKW TNLTMLDLSY NNLNVVGNDS
 FAWLPQLEYF FLEYNNIQHL FSHSLHGLFN VRYLNLKRSF TKQSISLASL
 PKIDDFSQW LKCLEHLNME DNDIPGIKSN MFTGLINLKY LSLSNSFTSL
 RTLNETFVS LAHSPLHILN LTKNKISKIE SDAFSWLGH LLDLQHNLA
 GQELTGQEW R GLENIFEIYL SYNKYQLTR NSFALVPSLQ RLMLRRVALK
 NVDSSPSPFQ PLRNLITLDL SNNNIANIND DMLEGLEKLE ILDLQHNLA
 RLWKHANPGG PIYFLKGLSH LHILNLESNG FDEIPVEVFK DLFELKIIDL GLNNLNTLPA
 SVFNNQVSLK SLNLQKNLIT SVEKKVFGPA FRNLTELMR FNPFDCTCES
 IAWFVNWINE THTNPELSS HYL CNTPPHY HGFPVRLFD TSSCKDSAPPE L

BIOLOGICAL ACTIVITY: Determined by its ability to inhibit IL-8 secretion induced by Poly I:C in the TLR3 receptor-expressing HEK293 cells (HEK293 TLR3r). The ED₅₀ for this effect is ≤ 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)

FOR RESEARCH USE ONLY! Not to be used in humans.