

Recombinant Human Toll-like Receptor 3

Cat. No. TLR3-975H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human TLR-3 produced in 293 cells is 77.0 kDa glycoprotein containing 681 residues which comprise the TLR-3 extracellular domain.
Species	Human
Source	HEK293
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.
Purity	95 % (SDS-PAGE, HPLC).
Endotoxin level	< 0.1 ng per μ g of TLR-3.
Stabilizer	None.
Formulation	Lyophilized.

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Biologically 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 $\mu\text{g/ml}$ in the presence of 100 $\mu\text{g/ml}$ of Poly I:C.

Stability The lyophilized protein is stable for at least 2 years from date of receipt at -20°C . Reconstituted TLR-3 is stable for at least 3 months when stored in working aliquots with a carrier protein at -20°C . Avoid repeated freeze-thaw cycles.

GENE INFORMATION

Gene Name TLR3 toll-like receptor 3 [Homo sapiens]

Synonyms TLR3; toll-like receptor 3; CD283

Gene ID 7098

mRNA Refseq NM_003265

Protein Refseq NP_003256

MIM 603029

UniProt ID O15455

Chromosome Location 4q35

pathway Toll-like receptor signaling pathway

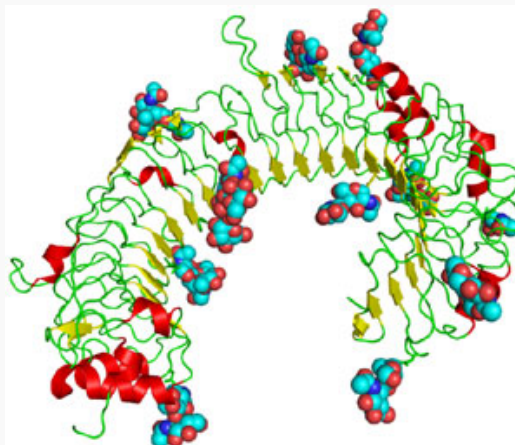
Function double-stranded RNA binding; protein binding; transmembrane receptor activity

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The structure of
TLR3 covered with
sugars



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