Toll-Like Receptors (TLRs)
**TLR and NFκB Signaling Peptide Inhibitors**

Cell permeable peptides are research tools for manipulating signal transduction pathways by blocking signaling events that elicit immune responses.

What is a decoy? A decoy is a realistic replica used as a lure or bait.

**Lingo in the TLR Field**

Adaptation immune system - acquired immune defense

Blockage TLR by decoy immune system prevents TLR engagement and signal propagation.

**Plasma Membrane TLRs**

Endogenous ligands recognize molecular components localized on the surface of pathogens.

**Endosomal TLRs**

Endogenous ligands: mediate the recognition of DNA and RNA from pathogens.

**TLR Adaptor & Accessory Proteins**

TLR Adaptor and Accessory Proteins: essential roles in TLR signaling, ligand recognition, activation, and subcellular localization.

**TLR Downstream Signaling**

TLR Downstream Signaling Proteins: propagate activated TLR signals from their origins towards their destinations.

**Example: Inhibition of LPS-Mediated TLR4 Activation with VIPER**

**Table: TLR/NFκB SEAP Cell Lines & Ligands**

**U.S. AND INTERNATIONAL CUSTOMERS**

**European customers**

**Canadian customers**

**Novus Biologics & Innate Immunity: The Story Toll’d**

The Toll-like receptor (TLR) story ‘Toll’d’ could be said to have begun in 1985 with the discovery of proteins inducing dorsal-ventral development in Drosophila embryos. These proteins were termed ‘Toll’ from the German for ‘weird’ because flies lacking Toll developed in a weird way.

The discovery of Toll sparked a new age in immunology during the 1990’s when mammalian homologues, TLRs, were discovered and found to be essential for innate immunity. It is now being increasingly recognised that TLRs have far reaching roles beyond initial innate immune responses, as well as linking inflammation and disease.

Novus Biologics is proud to have the most comprehensive portfolio of high-quality and published TLR products including antibodies, ligands, inhibitors, and engineered cell lines.


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