

Poly(dT)

TLR7/8 modulator

Catalog code: tlr1-pt17

<https://www.invivogen.com/polydt>

For research use only

Version 19F11-MM

PRODUCT INFORMATION

Contents

- 100 nmol poly(dT), a 17-mer phosphorothioate polyT ODN
- 1.5 ml sterile endotoxin-free water

Storage and stability

- Poly(dT) is provided as a lyophilized powder and shipped at room temperature. Store at -20°C.
- Lyophilized product is stable for 1 year at -20°C when properly stored.
- Upon resuspension, prepare aliquots of poly(dT) and store at 4°C or at -20°C.
- Resuspended product is stable for 1 month at 4°C and for 6 months at -20°C. Avoid repeated freeze-thaw cycles.

Quality control

- The stimulatory activity has been verified using HEK-Blue™ TLR8 cells.
- The inhibitory activity has been verified using HEK-Blue™ TLR7 cells.
- The absence of bacterial contamination (e.g. lipoproteins and endotoxins) has been confirmed using HEK-Blue™ TLR2 and HEK-Blue™ TLR4 cells.

DESCRIPTION

Poly(dT), a thymidine homopolymer phosphorothioate ODN, is a modulator of human TLR7 and TLR8. In combination with an imidazoquinoline, such as R848 and CL075, it increases TLR8-mediated signaling but abolishes TLR7-mediated signaling^{1, 2}. Alone poly(dT) has no significant effect on either of these TLRs. Furthermore, co-incubation of poly(dT) and an imidazoquinoline was shown to induce NF-κB activation in HEK293 cells transfected with murine TLR8- and primary TLR8-expressing mouse cells, demonstrating that murine TLR8 is functional³.

1. Jurk M. *et al.*, 2006. Modulating responsiveness of human TLR7 and 8 to small molecule ligands with T-rich phosphorothioate oligodeoxynucleotides. *Eur J Immunol.* 36(7):1815-26. 2. Gorden KKB. *et al.*, 2006. Oligodeoxynucleotides Differentially Modulate Activation of TLR7 and TLR8 by Imidazoquinolines. *J. Immunol.* 177: 8164-70. 3. Gorden KKB. *et al.*, 2006. Cutting Edge: Activation of Murine TLR8 by a Combination of Imidazoquinoline Immune Response Modifiers and PolyT Oligodeoxynucleotides. *J. Immunol.*, 177:6584-7.

METHODS

Resuspension

- To obtain a stock solution at 100 μM (100 nmol/ml).
- Add 1 ml of sterile endotoxin-free water (provided) to the tube containing 100 nmol of poly(dT).
 - Vortex until completely dissolved.

Working Concentration: 10 μM

RELATED PRODUCTS

Product	Description	Cat. Code
CL075	TLR7/8 ligand	tlr1-c75
CL097	TLR7/8 ligand	tlr1-c97
CL264	TLR7 ligand	tlr1-c264
HEK-Blue™ hTLR7 cells	hTLR7 reporter cells	hkb-htlr7
HEK-Blue™ mTLR7 cells	mTLR7 reporter cells	hkb-mtlr7
HEK-Blue™ hTLR8 cells	hTLR8 reporter cells	hkb-htlr8
HEK-Blue™ mTLR8 cells	mTLR8 reporter cells	hkb-mtlr8
Gardiquimod™	TLR7 ligand	tlr1-gdqs
Imiquimod (R837)	TLR7 ligand	tlr1-imqs
R848 (Resiquimod)	TLR7/8 ligand	tlr1-r848
TL8-506	TLR8 ligand	tlr1-tl8506

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