ODN 1826 (TLRGRADE[®]) (synthetic)

TLR9 ligand

CpG oligodeoxynucleotide (Type B) with phosphorothioate backbone. Specific ligand for mouse TLR9 (Toll-like receptor 9).

Citations: 7

View Online »

Ordering Information

Order Online »

ALX-746-002-C100

100µg

Manuals, SDS & CofA

View Online »

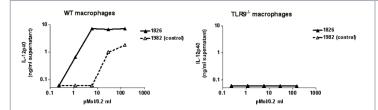


Figure 1: TLR9-dependent activation of mouse macrophages by ODN 1826 (TLRGRADE®) (synthetic) (Prod. No. ALX-746-002). **Method:** Culture of 5×10⁵ cells per 200µl well was performed in serum-free conditions after addition of ODNs at the indicated concentrations. Cell activation was measured by IL12p40 induction. Only CpG ODN 1826 (Prod. No. ALX-746-002), but not the corresponding GpC control ODN 1982 (Prod. No. ALX-746-201) activates wild type mouse macrophages. Activation is absolutely dependent on the presence of TLR9 as addressed with cells derived from TLR9-deficient mice. Note the logarithmic scale for the x and y-axis and the high activity of the active ODNs: max. stimulation is already achieved with 0.010-0.100nmol per 200µl well (10-100nM, corresponding to ~0.5-5ug/ml).

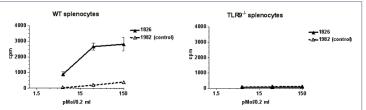


Figure 2: TLR9-dependent mitogenic activity of ODN 1826 (TLRGRADE®) (synthetic) (Prod. No. ALX-746-002) in mouse splenocytes. **Method:** Culture of 5×10⁵ cells per 200µl well was performed in serum-free conditions after addition of ODNs at the indicated concentrations. Cell proliferation was analyzed after 72 hours with a 16 hours³H-thymidine pulse.Only CpG ODN 1826 (Prod. No. ALX-746-002), but not the corresponding GpC control ODN 1982 (Prod. No. ALX-746-201) induces proliferation of wild type mouse splenocytes. Induction of cell proliferation is absolutely dependent on the presence of TLR9 as addressed with cells derived from TLR9-deficient mice. Note the logarithmic scale for the x and y-axis and the high activity of the active ODNs: max. stimulation is already achieved with 0.010-0.100nmol per 200µl well (10-100nM, corresponding to ~0.5-5ug/ml).

Handling & Storage

Use/Stability As indicated on product label or CoA when stored as recommended. Aqueous stock

solution is stable for 1 day when stored at +4°C.

Handling Protect from light. For maximum product recovery after thawing, centrifuge the vial

before opening the cap. After reconstitution, prepare aliquots and store at -20°C.

Long Term Storage +4°C

Shipping Ambient Temperature

Regulatory Status RUO - Research Use Only

Product Details

Alternative Name CpG-B

Couple Target TLR, TLR9

Couple Type Ligand

Endotoxin Content <0.002EU/μg (LAL test; BioWhittaker)

Formulation Lyophilized. Sterile.

MW 6383 (ammonium salt)

Purity Detail Activity and endotoxin tested – TLRGRADE®.

Quantity 15nmol (~96µg). Sufficient for at least 100 cellular

activation assays at 0.1-0.5µg/well when performed in a

200µl assay volume (i.e. 96 well microtiter plate).

Reconstitution For a 100µM stock solution, dissolve the total vial content

in 150 μ l endotoxin-free water (included) or PBS (to order separately).To obtain optimal dissolving we recommend the following procedure:- Add 50% of the solvent and let dissolve for 10 min.- Add remaining 50% of the solvent

and mix thoroughly.- Moderate warming may aid

dissolving.

Sequence 5'-tccatgacgttcctgacgtt-3' (lower case letters

indicate phosphorothioate linkage).

Source

Synthetic.

Technical Info / Product Notes

Includes 1 vial of ddWater (endotoxin-free) (Prod. No. ALX-505-008).

For inactive control compound, please see Prod. No. ALX-746-201.

Last modified: May 29, 2024



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