

ODN ligand

CpG ODN (1668), TLR9 ligand (Class B)

CATALOG # AAA78388	REACTIVITY Rat, Mouse	APPLICATIONS Functional Assay
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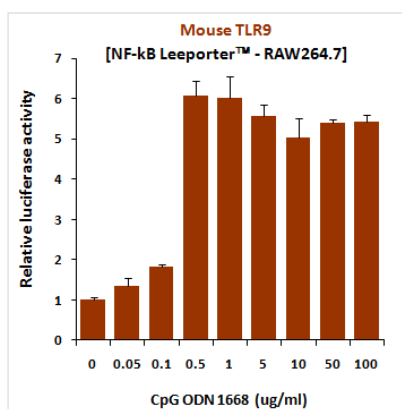
PRODUCT SYNONYMS

ODN; CpG ODN (1668); TLR9 ligand (Class B); ODN ligand

PRODUCT SPECIFICATIONS

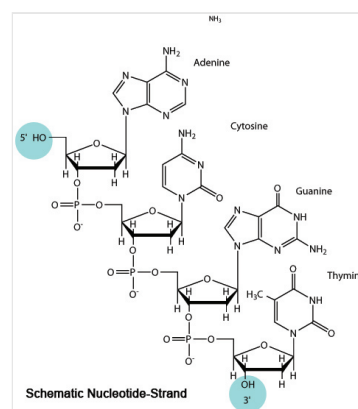
Reactivity	Rat, Mouse
Form/Format	1 mg/ml in endotoxin-free water
Applicable Applications for ODN ligand	FA (Functional Assay)
Preparation and Storage	Upon receipt, store at -20 degree C (Stable for at least 6 months). Avoid frequent freeze/thaw cycles.

IMAGES



Application Data

Fig-2. Induction of mouse TLR9 activity by CpG ODN 1668.



Structure

Fig-1: chemical structure of CpG ODN

ADDITIONAL INFORMATION

Related Product Information for ODN ligand	Sequence: 5'-tccatgaCGttcctgatgct-3' (Class B ODN 1668: Bases are phosphorothioate.) Synthetic oligodeoxynucleotides (ODN) containing unmethylated deoxycytosine-deoxyguanosine (CpG) motif are equivalent to bacterial DNA in the immunostimulatory activity, which can induce innate immunity via Toll-like receptor 9 (TLR9) in mammals. There are three major classes of CpG ODNs, and each ODN class exhibits different stimulatory effects on immune cell activation. Class A ODNs are potent inducers of IFN-alpha that leads to the plasmacytoid dendritic cell (pDC) maturation. Class B ODNs are relatively weak inducers of type I IFNs but strong stimulators of human B cells and monocyte maturation. Class C ODNs combine elements of both Classes A and B ODNs, which can induce IFN-alpha in pDC and activation of B cells.
Product Categories/Family for ODN ligand	Ligands and Inhibitors ; TLR Ligands

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

