ALPHA DIAGNOSTIC INTERNATIONAL

Product Specification Sheet

ODN-DSL01-Type B CpG oligonucleotide – Multispecies TLR9 ligand

Cat # ODNDSL01-1 ODN-DSL01- Type B CpG oligonucleotide - Multispecies TLR9 ligand, antigen grade **Size: 200 ug**

CpG oligodeoxynucleotides (or CpG ODN) are short single-stranded synthetic DNA molecules that contain an unmethylated CG (Cytosine–guanine) di nucleotide in a specific base sequence (CpG motifs). The p refer to the phosphodiester backbone. These CpG motifs are not seen in eukaryotic DNA are considered pathogen-associated molecular patterns (PAMPs). The CpG PAMP is recognized by (TLR9).3 types of, inhibitory ODNS have been identified.

Class A stimulate the production of large amounts of Type I interferons, induce the maturation of pDCs. They are also strong activators of NK cells through indirect cytokine signaling.

Class B ODN is strong stimulators of human B cell and monocyte maturation. They also stimulate the maturation of pDC but to a lesser extent than Class A ODN and very small amounts of IFNα.

Class C ODN combine features of both type A and B. They contain a complete phosphorothioate backbone and a CpG-containing palindromic motif. They induce strong IFN-α production from DC and B cell stimulation.

ODN D-SL01 is a type B CpG ODN and a TLR9 agonist in a diverse vertebrate species, namely humans, mice, rats, rabbits, pigs and dogs. ODN D-SL01 is composed of double stem loops, a phosphorothioate backbone and two GACGTT motifs. D-SL01 has been shown to potently activate human B cells, NK cells and mononuclear cells as well as PBMC/splenocytes obtained from diverse vertebrate species, namely mice, rats, rabbits, dogs and pigs. ODN D-SL01 demonstrates anti-tumor activity in mice with established breast cancer.

Cat#:ODN-DSL01

Sequence	5′-tcg cga cgt tcg ccc gac gtt cgg ta-3′ (26 mer)
Purity	≥90%
Form and storage	Powder. After reconstitution, Store at -20°C up to 1 year
Shipping	Shipped at 4° C

Notes:

1) Bases in capital are phosphodiester and those in lower case are phosphorothioate. Palindromic sequences are underlined.
2) Negative control Contains GpC nucleotides instead of CpG

General references: Lenert P. etal. (2003) DNA Cell Biol. 22(10):621-31; Krieg A.M(1995). Nature 374(6522):546-9; Ballaz ZK (2001) 167(9). Bauer (2001). PNAS 98 (16):9237-42; P. S. Yang L. et al., (2013) Int Immunopharmacol. 15(1):89-96.

Related Items

ODN006-1 ODNBW006 Type B CpG ODN structure feature at the 5' and A-type CpG ODN structure feature at the 3' end

ODN1668-1 ODN 1668-Type B murine TLR9 Agonist-Antigen grade

ODN1668-1NC ODN1668- Type B murine TLR9 Agonist (Negative Control), antigen grade

ODN1826-1 ODN 1826- Type B murine TLR9 Agonist-antigen grade

ODN2006-1 ODN 2006 -Type B-human TLR9 agonist-antigen grade

ODN2007-1 ODN 2007-Type B bovine/porcineTLR9 agonist-antigen grade

ODN2216-1 ODN 2216-Type A human TLR9 Agonist.-antigen grade

ODN2395-5 ODN 2395-Type C human/murine TLR9 agonist-antigen grade

ODN4084F-1 ODN 4084-Type B Inhibitory TLR9 Antagonist.-antigen grade

ODNTT-1NC ODN TTAGGG-Class G Human-TLR 9 Antagonist, antigen grade

SIODN-1 Inhibitory iODN- class I/II hybrid, may also affect TLR7 and TLR8 signaling.

ODNIHN1-1 ODN INH-1-Class R (restricted) inhibitory ODN-TLR 9 Antagonist-antigen grade

ODNINH47-1 ODN INH-47-Class R (restricted) inhibitory ODN TLR9 Antagonist-Palindromic variant of ODN INH-1-antigen grade

ODNM362-1 ODN M362-Type C human/murine TLR9 agonist-antigen grade-antigen grade

ODNM362-1NC ODN M362-Type C human/murine TLR9 agonist (negative control), antigen grade

ODNM362-5 ODN M362-Type C human/murine TLR9 agonist-antigen grade-antigen grade

ODNM362-5NC ODN M362-Type C human/murine TLR9 agonist (negative control), antigen grade

ODN-NT-1 Neutral ODN control ODN without agonistic nor antagonistic activity antigen grade

ODN-PK-1 Mouse TLR9-agonist kit; contains 100 ug of ODN1585-1; ODN1826-1, ODN2395-1, and negative controls ODN1585-1NC; ODN1826-1-1NC, ODN2395-1NC

ODN-PK-2 Human TLR9-agonist kit; contains 100 ug of ODN2006-1; ODN2216-1; ODN2395-1; and negative controls ODN2006-1NC; ODN2216-1NC; ODN2395-1NC

ODN-PK-3 TLR9-antagonist kit; contains 100 ug of ODN2088-1; ODN4084-F; ODNINH-1; ODNINH-18; ONDTT-1.

ODN-PK-4 TLR9-A&C class agonist kit, Contains 100 ug of ODN1585-1; ODN2216-1; ODN2336-1;ODN 2395 and ODN M362; ODNDSL03

ODNDSL01-1 **180725AC**

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