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| □ Cat. #ODNM362-1 | ODN M362- Type C human/ murine TLR9 Agonist, antigen grade | Size: 1 mg |
| □ Cat. #ODNM362-5 | ODN M362- Type C human/ murine TLR9 Agonist, antigen grade | Size: 5 mg |
| □ Cat. #ODNM362-1NC | ODN M362- Type C human/ murine TLR9 Agonist (Negative Control), antigen grade | Size: 1 mg |
| □ Cat. #ODNM362-5NC | ODN M362- Type C human/murine TLR9 Agonist (Negative Control), antigen grade | Size: 5 mg |
| □ Cat. #ODNM362-F | ODN M362- Type C human/murine TLR9 Agonist FITC Conjugate, antigen grade | Size: 1 OD |
| □ Cat. #ODNM362-B | ODN M362- Type C human/murine TLR9 Agonist Biotin Conjugate, antigen grade | Size: 1 OD |

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, stimulatory ODNs have been identified based upon immunostimulatory activities.

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 are strong stimulators of bovine/porcine 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 IFN α .

Class C ODN combine features of both types 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 M362 is a Class C human/murine TLR9 agonist. ODN M362 is a recently identified CpG ODN termed CpG-C that displays both high induction of PDC and activation of B cells. ODN M362 contains a central palindromic sequence with CpG dinucleotides a characteristic feature of CpG-A, and a 'TCGTCG' motif at the 5' end, present in CpG-B. The recognition of CpG ODNs is mediated primarily by TLR9

Cat.#:ODNM362-1 & ODNM362-5

| | |
|-------------------------|--|
| Sequence | 5'- <u>tcgtcgctcgttcgaacgacgcttgat</u> -3'(25 mer) |
| Purity | ≥95% |
| Form and storage | Powder. After reconstitution, Store at -20C up to 1 year |
| Shipping | Shipped at 4° C |
| Solubility | water, PBS or other buffers (up to 5 mg/ml) |

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.

Cat. #:ODNM362-1NC & Cat. #:ODNM362-5NC (negative control)

| | |
|-------------------------|--|
| Sequence | 5' <u>tcgtcgctcgttcgaacgacgcttgat</u> -3' (25 mer) |
| Purity | ≥95% |
| Form and Storage | Powder. Store at -20C upto 1 year. |
| Shipping | Shipped at 4° C |
| Solubility | water, PBS or other buffers (up to 5 mg/ml) |

Cat. #:ODNM362-F, FITC Conjugate

| | |
|-------------------------|---|
| Sequence | 5'- <u>tcgtcgctcgttcgaacgacgcttgat</u> -FITC' (25 mer) |
| Purity | ≥95% |
| Form and Storage | Powder. After reconstitution, Store at -20oC up to 1 year |
| Shipping | Shipped at 4° C |
| Solubility | water, PBS or other buffers (up to 5 mg/ml) |

Cat. #:ODNM362-B, Biotin Conjugate

| | |
|-------------------------|---|
| Sequence | 5'- <u>tcgtcgctcgttcgaacgacgcttgat</u> -Biotin (25 mer) |
| Purity | ≥95% |
| Form and Storage | Powder. After reconstitution, Store at -20C up to 1 year. |
| Shipping | Shipped at 4° C |
| Solubility | water, PBS or other buffers (up to 5 mg/ml) |

General references: Krieg,A.M(1995). Nature, 374(6522):546-9. Ballaz ZK(2001) 167(9). Bauer, (2001).PNAS.98(16):9237-42 Hartmann G (2003). Eur J Immunol.33 (6):1633-41.4.

for in vitro research only

Related Items

| Catalog# | ProdDescription |
|-------------|--|
| 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 | ODN 1668- 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 |
| ODN4084F-5 | 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. |

ODNM362

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