



Product Specification Sheet

ODN 1585-Type A-Murine TLR9 agonist Controls and Conjugates (antigen grade)

Cat. # ODN1585-1	ODN 1585-Type A murine TLR9 agonist, antigen grade	Size: 1 mg
Cat. # ODN1585-5	ODN 1585-Type A murine TLR9 agonist, antigen grade	Size: 5 mg
Cat. # ODN1585-1NC	ODN 1585-Type A murine TLR9 agonist (Negative Control), antigen grade	Size: 1 mg
Cat. # ODN1585-5NC	ODN 1585-Type A murine TLR9 agonist (Negative Control), antigen grade	Size: 5 mg
<input type="checkbox"/> Cat. # ODN1585-F	ODN 1585-Type A murine TLR9 agonist FITC Conjugate, antigen grade	Size: 50 ug
<input type="checkbox"/> Cat. # ODN1585-B	ODN 1585-Type A murine TLR9 agonist Biotin Conjugate, antigen grade	Size: 50 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, 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 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 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 1585 is a Type A murine TLR9 agonist. It has been demonstrated that CpG ODN 1585, whose mechanism of action preferably involves indirect activation of the natural killer cells, induced regression of the MHC class I-deficient tumors TC1/A9 but not of the MHC class I-proficient tumors TC-1. This study infers that synthetic CpG ODN have a potential for the therapy of both MHC class I-proficient and -deficient tumors and thus could be also used against tumors that tend to down-regulate their MHC class I expression.

Cat. #:ODN1585-1 & ODN1585-5

Sequence	5'- ggGGTCAACGTTGAgggggg- 3' (20 mer)
Mol. Wt	6643
Purity	≥95%
Form and storage	Powder. After reconstitution, Store at -20C up to 1 year.
Shipping	Shipped at 4° C
Endotoxin	<0.0001 EU/μg
Solubility	water, PBS or other buffers (up to 5 mg/ml)

Note:

- 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. #:ODN1585-1NC & Cat. #:ODN1826-5NC (negative control)

Sequence	5'-ggGGTCAAGCTTGAgggggg-3' (20 mer)
Mol. Wt.	6643
Purity	≥95%
Form and Storage	Powder. Store at -20C upto 1 year.
Shipping	Shipped at 4° C
Endotoxin	<0.0001 EU/μg
Solubility	water, PBS or other buffers (up to 5 mg/ml)

Cat. #:ODN1585-F, FITC Conjugate

Sequence	5'-ggGGTCAACGTTGAgggggg – FITC' (20 mer)
Mol. Wt.	
Purity	≥95%
Form and Storage	Powder. After reconstitution, Store at -20C up to 1 year..
Shipping	Shipped at 4° C
Endotoxin	<0.0001 EU/μg
Solubility	water, PBS or other buffers (up to 5 mg/ml)

Cat. #:ODN1585-B, Biotin Conjugate

Sequence	5'-ggGGTCAACGTTGAgggggg – Biotin' (20 mer)
Mol. Wt.	
Purity	≥95%
Form and Storage	Powder. After reconstitution, Store at -20C up to 1 year.
Shipping	Shipped at 4° C
Endotoxin	<0.0001 EU/μg
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. Reinis M, Símová J, Bubeník J Int J Cancer. (2006) 118(7):1836-42

Related Items

ODN1585-1, ODN1668-1, ODN1826-1, ODN2006-1, ODN2336-1, ODN2395-1, ODN2007-1, ODNM362-1, ODN2088-1 ODN2216-1, ODNINH1-1, ODN4084F-1, ODNINH1-1, ODNINH4-1, ODNNTT-1, GODN-1, CIODN-1, SIODN-1, DIODN-1, ATODN2-1, ATODN3-1



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