

□ <b>Cat. # ODN1585-1</b>	ODN 1585-Type A murine TLR9 agonist, antigen grade	<b>Size: 1 mg</b>
□ <b>Cat. # ODN1585-5</b>	ODN 1585-Type A murine TLR9 agonist, antigen grade	<b>Size: 5 mg</b>
□ <b>Cat. # ODN1585-1NC</b>	ODN 1585-Type A murine TLR9 agonist (Negative Control), antigen grade	<b>Size: 1 mg</b>
□ <b>Cat. # ODN1585-5NC</b>	ODN 1585-Type A murine TLR9 agonist (Negative Control), antigen grade	<b>Size: 5 mg</b>
▪ <b>Cat. # ODN1585-F</b>	ODN 1585-Type A murine TLR9 agonist <b>FITC</b> Conjugate, antigen grade	<b>Size: 50 ug</b>
▪ <b>Cat. # ODN1585-B</b>	ODN 1585-Type A murine TLR9 agonist <b>Biotin</b> Conjugate, antigen grade	<b>Size: 50 ug</b>

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 $\alpha$ .

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- $\alpha$  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**

<b>Sequence</b>	5'-ggGGTCAAC <b>CG</b> TTGAgggggg-3' (20 mer)
<b>Mol. Wt</b>	6431.5
<b>Purity</b>	≥95%
<b>Form and storage</b>	Powder. After reconstitution, Store at -20C up to 1 year.
<b>Shipping</b>	Shipped at 4° C
<b>Solubility</b>	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)**

<b>Sequence</b>	5'-ggGGTCAAG <b>CTT</b> GAgggggg-3' (20 mer)
<b>Mol. Wt.</b>	6431.5
<b>Purity</b>	≥95%
<b>Form and Storage</b>	Powder. Store at -20C upto 1 year.
<b>Shipping</b>	Shipped at 4° C
<b>Endotoxin</b>	<0.0001 EU/μg
<b>Solubility</b>	water, PBS or other buffers (up to 5 mg/ml)

**Cat. #:ODN1585-F, FITC Conjugate**

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

**Cat. #:ODN1585-B, Biotin Conjugate**

<b>Sequence</b>	5'-ggGGTCAAC <b>CG</b> TTGAgggggg -Biotin' (20 mer)
<b>Purity</b>	≥95%
<b>Form and Storage</b>	Powder. After reconstitution, Store at -20C up to 1 year.
<b>Shipping</b>	Shipped at 4° C
<b>Endotoxin</b>	<0.0001 EU/μg
<b>Solubility</b>	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**

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
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.

**ODN 1585**

**130225P**