

Product Specification Sheet

ODN 1826-Type B-Murine TLR9 agonist Controls and Conjugates (antigen grade)

□ Cat. # ODN1826-1	ODN 1826- Type B murine TLR9 Agonist, antigen grade	Size: 1 mg
□ Cat. # ODN1826-5	ODN 1826- Type B murine TLR9 Agonist, antigen grade	Size: 5 mg
□ Cat. # ODN1826-1NC	ODN 1826- Type B murine TLR9 Agonist (Negative Control), antigen grade	Size: 1 mg
□ Cat. # ODN1826-5NC	ODN 1826- Type B murine TLR9 Agonist (Negative Control), antigen grade	Size: 5 mg
□ Cat. # ODN1826-F	ODN 1826- Type B murine TLR9 Agonist FITC Conjugate, antigen grade	Size: 50 ug
□ Cat. # ODN1826-B	ODN 1826- Type B 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 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 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 1826 is a Type B murine TLR9 agonist. In murine models it has been shown to increase the immune response in tumor models which decrease the size of tumors when used in combination with tumor immunotherapy. In other research, ODN 1826 which stimulates TLR9 has also been shown to induce tolerance (precondition) to ischemic brain injury in a mouse model of stroke and has also been shown in a nonhuman primate model, the rhesus macaque.

Cat. #:ODN1826-1 & ODN1826-5

Sequence	5'-tccatgacggtcctgacggtt-3' (20 mer)
Mol. Wt	6364.1
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.
- 2) Contains GpC nucleotides instead of CpG.

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

Sequence	5' tccatgacggtcctgacggtt-3' (20mer)
Mol. Wt.	6364.1
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)

Cat. #:ODN1826-F, FITC Conjugate

Sequence	5'-tccatgacggtcctgacggtt-FITC (20 mer)
Form and Storage	Powder. After reconstitution, Store at -20C up to 1 year
Shipping	Shipped at 4° C
Mol. wt	6817.6
Solubility	water, PBS or other buffers (up to 5 mg/ml)

Cat. #:ODN1826-B, Biotin conjugate

Sequence	5'-tccatgacggtcctgacggtt -Biotin (20 mer)
Form and Storage	Powder. After reconstitution, Store at -20C up to 1 year
Shipping	Shipped at 4° C
Mol. wt	6949.7
Solubility	water, PBS or other buffers (up to 5 mg/ml)

General references: Krieg A.M (1995) Nature, 374:546-9; Bauer, (2001) PNAS.98 :9237-42; Yuan S (2011).Cancer Biother Radiopharm. 203-8.

Related Items

Catalog#	ProdDescription
ODN1668-1	ODN 1668-Type B murine TLR9 Agonist-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 grade	ODN 2007-Type B bovine/porcineTLR9 agonist-antigen grade
ODN2216-1	ODN 2216-Type A human TLR9 Agonist.-antigen grade
ODN2395-5 grade	ODN 2395-Type C human/murine TLR9 agonist-antigen grade
ODN4084F-1 grade	ODN 4084-Type B Inhibitory TLR9 Antagonist.-antigen grade
ODN1826	140702P