

ODN 1668 sodium

## Chemical Properties

CAS No. :

Formula:

Molecular Weight:

Storage:

-20°C for 1 year

Actual storage temperature shall be subject to the COA.

## Biological Description

Description	ODN 1668 sodium is a B class CpG ODN (oligodeoxynucleotide) recognized as a TLR-9 agonist. It demonstrates potent immunomodulatory effects by enhancing the level of IgG2 subtype antibodies and stimulating both T cell and B cell immune responses, making it useful for vaccine adjuvant research. Additionally, CpG ODN 1668 sodium induces antibacterial immune responses in orange-spotted grouper through a CaTLR9-dependent pathway. Sequence: 5'-tccatgacgttctctgatgct-3'.
Targets(IC50)	Antibacterial,TLR
In vitro	ODN 1668, at a non-salt dosage, ranging from 6-60 µg/mL for 12-72 hours, enhances the synthesis of S100A8/A9, IL-6, and β-galactosidase in mouse bone marrow-derived macrophages. Administered for 24 hours, ODN 1668 promotes B cell activation and proliferation while increasing the expression of CD86 and CD25. Additionally, ODN 1668, at concentrations of 0.3-3.0 µM over four days, supports the dose-dependent growth of CD8+ T cells treated with anti-CD3. At concentrations from 0.25-32 µg/mL for 12 hours, ODN 1668 promotes head kidney lymphocyte proliferation and enhances the expression of immune-related genes.
In vivo	Non-salt dosage: ODN 1668 (10 nmol ≈ 63.6 µg; injected into the hind paw; single dose) significantly enhanced the antibody response and increased IgG2a and IgG2b titers in OVA-treated mice. ODN 1668 (15 µg; intramuscular injection; single dose) improved the grouper's antimicrobial immunity against delayed cestode infection, with the liver, spleen, and kidneys showing the most pronounced antibacterial activity. ODN 1668 (1-5 mg/kg; intraperitoneal/subcutaneous injection; single dose) can induce fever, anorexia, and brain inflammation in rats.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286

E\_mail:info@targetmol.com

Address:34 Washington Street,Wellesley Hills,MA 02481