

# Product Datasheet

## CpG oligodeoxynucleotides Mouse NBP2-26235

Unit Size: 2 Vials

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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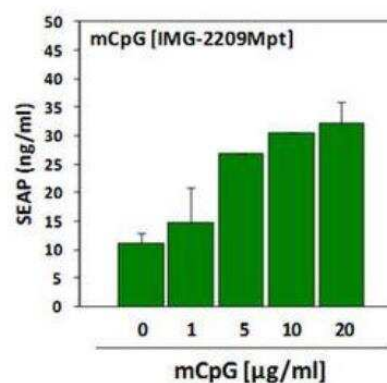
**NBP2-26235****CpG oligodeoxynucleotides Mouse**

<b>Product Information</b>	
<b>Unit Size</b>	2 Vials
<b>Concentration</b>	Please see the protocols for proper use of this product. If no protocol is available, contact technical services for assistance.
<b>Storage</b>	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
<b>Buffer</b>	Sterile water

<b>Product Description</b>	
<b>Description</b>	<p><b>Mouse Sequence CpG ODN (1826) Type B:</b> 5' <i>T*C*C*A*T*G*A*C*G*T*T*C*C*T*G*A*C*G*T*T</i> 3' (* Indicates a phosphorothioate modification)</p> <p><b>Negative Control oligo:</b> 5' <i>TCCATGAGCTTCCTGAGCTT</i> 3'</p> <p><b>Functionality:</b> This product is useful for the activation of TLR9 and the stimulation of TLR9 has been reported with 5-20 ug/ml.</p>
<b>Species</b>	Mouse
<b>Specificity/Sensitivity</b>	CpG ODN (1826) with negative control oligo, TLR9 ligand (mouse)
<b>Kit Components</b>	NBP2-31132: CpG oligodeoxynucleotides Mouse, NBP2-31133: Negative Control oligodeoxynucleotide Mouse
<b>Product Application Details</b>	
<b>Applications</b>	Ligand Activation
<b>Recommended Dilutions</b>	Ligand Activation 5-20 ug/ml
<b>Application Notes</b>	A TLR9/NF-kB SEAP reporter construct in a HEK 293 cell line was used as a model system for studying hTLR9 activation.

**Images**

CpG oligodeoxynucleotides Mouse [NBP2-26235] - CpG oligodeoxynucleotides Mouse Evaluation of the mCpG ODN 1826 ligand activity on NF-kB SEAPorter RAW cell line. Cell line is a stably transfected RAW 264.7 cell line that expresses the secreted alkaline phosphatase (SEAP) reporter gene under the transcriptional control of an NF-kB response element. RAW 264.7 cells endogenously express Toll-like receptor 9 (TLR9). Cells were plated in 96-well plates at  $0.85 \times 10^5$  cells/well. After 16 h, cells were stimulated with various amounts of mCpG ODN 1826 for 24 h. SEAP was analyzed using the SEAPorter Assay Kit. Data Summary: mCpG ODN 1826 specifically activated the TLR9-dependent NF-kB/SEAP reporter cells in a dose dependent manner.



## Publications

Furuhashi K, Suda T, Hasegawa H et al. Mouse lung CD103+ and CD11bhigh dendritic cells preferentially induce distinct CD4+ T-cell responses. *Am J Respir Cell Mol Biol*. 2012-02-01 [PMID: 21908266]

### Details:

PAM3CSk4(IMG-2201) & CpG-ODN (IMG-2209Mpt). CD103+ and CD11bhigh mouse lung dendritic (LDCs) cells were stimulated with LPS and with or without PAM3CSk4 and CpG-ODN. Cytokine levels were measured by ELISA, Fig 7.



## Procedures

### MSDS (NBP2-26235)

CpG oligodeoxynucleotides Mouse:

#### Hazard Information

Chemical Name: ODN 1826 & Negative Control

Chemical Formula: CpG ODN- 5' TCCATGACGTTCTGACGTT 3' (in bold is phosphorothiate linkage)

CAS Number: N/A

EEC-No: N/A

#### First Aid Measures

Eye Contact: May cause eye irritation.

Skin Contact: May cause skin irritation. May be harmful if absorbed through the skin.

Inhalation: May causes respiratory tract irritation. May be harmful if inhaled.

Ingestion: May be harmful if swallowed.

#### Fire Fighting Measures

Special risks: N/A

Suitable Extinguish Media: Water spray, carbon dioxide, dry chemical powder or appropriate foam.

#### Accidental Release Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Consult a physician.

Skin: Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. **SPEEDY ACTION IS CRITICAL!**

Ingestion: If swallowed, get medical aid immediately. Only induce vomiting if directed to do so by medical personnel.

Never give anything by mouth to an unconscious person.

Inhalation: Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. **SPEED IS ESSENTIAL, OBTAIN MEDICAL AID IMMEDIATELY.** Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Notes: Consult a physician. Show this safety data sheet to the physician. Move away from the dangerous area.

#### Handling and Storage

Handling: Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. Avoid inhalation. Use personal protective equipment (i.e. impermeable gloves, lab coat or apron).

Store at -20 degrees C. Store in a tightly closed container. Stable under recommended storage conditions

#### Exposure Controls / Personal Protection

##### Physical and Chemical Properties

Form: Powder

Color: Colorless

Odor: Odorless

Melting Point: No data available

Boiling Temperature: No data available

Density: No data available

Vapor Pressure: No data available

Solubility in Water: Very soluble

Flash Point: No data available

Explosion limits: No data available

Ignition Temperature: No data available

#### Stability and Reactivity

Stability: Stable

Hazardous Polymerization: Will not occur.

Materials to avoid: Strong oxidizing agents.

Hazardous Decomposition Products: Decomposition products are not hazardous.

HMIS Classification: Health Hazard 0, Flammability Hazard 0, Reactivity Hazard 0

NFPA Rating: Health Hazard 0, Fire 0, Reactivity Hazard 0.



#### Disposal Considerations

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Must not be disposed together with household garbage.

#### Other Information

The information contained in this material safety datasheet is believed to be accurate but it is the responsibility of the user or supplier to determine the applicability of these data to the formulation of necessary safety precautions. NOVUS shall not be held responsible for any damage resulting from the use of the above product or the information contained in this material safety data sheet.



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