

## Muramyl dipeptide (MDP)

Cat. No. LIGC-009

Lot. No. (See product label)

### Introduction

#### Description

Muramyl dipeptide (MDP) is the minimal bioactive peptidoglycan motif common to all bacteria, the essential structure required for adjuvant activity in vaccines. MDP has been shown to be recognized by NOD2, but not TLR2, nor TLR2/1 or TLR2/6 associations. This recognition is highly stereospecific of the L-D isomer, excluding any reaction to the D-D or L-L analogs. The potent adjuvant activity of MDP may be linked to an activation of the CIAS1/NALP3/Cryopyrin inflammasome.

#### Synonyms

N-Acetylmuramyl-L-Alanyl-D-Isoglutamine (L-D isoform); Muramyl dipeptide (L-D isomer, active); Muramyl dipeptide; MDP

### Product Information

<b>Form</b>	Lyophilized powder
<b>CAS No.</b>	53678-77-6
<b>Molecular Formula</b>	C <sub>19</sub> H <sub>32</sub> N <sub>4</sub> O <sub>11</sub>
<b>Molecular Weight</b>	492.5
<b>Concentration</b>	Working concentration: 10 ng - 10 µg/ml
<b>Specificity</b>	NOD2 agonist
<b>Solubility</b>	10 mg/ml in water

### Storage and Shipping Information

<b>Storage</b>	Store at -20°C. Upon resuspension, aliquote MDP and store at -20°C.
<b>Stability</b>	Product is stable 6 months at -20°C when properly stored. Avoid repeated freeze-thaw cycles.