Creative Enzymes®

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); Muramyldipeptide (L-D isomer, active); Muramyl dipeptide; MDP

Product Information

Form	Lyophilized powder
CAS No.	53678-77-6
Molecular Formula	C19H32N4O11
Molecular Weight	492.5
Concentration	Working concentration: 10 ng - 10 μg/ml
Specificity	NOD2 agonist
Solubility	10 mg/ml in water

Storage and Shipping Information

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