

N-Acetylmuramyl-L-alanyl-D-isoglutamine hydrate (muramyl dipeptide, MDP)

Catalog # 9065

For Research Use Only - Not Human or Therapeutic Use

DESCRIPTION: Mycobacterium tuberculosis, the main component in Complete Freund's Adjuvant, is used to up-regulate

the Th1 immune response in animals. Muramyl dipeptide (MDP) is an immunoreactive synthetic peptide

which mimics the active component in the cell wall of Mycobacterium tuberculosis (1).

APPLICATION: Use as an adjuvant for immunization to produce antibodies and develop adjuvant-induced arthritis and

collagen-induced arthirtis in rats (2).

QUANTITY: 2 mg

FORM: Lyophilized powder

MOLECULAR WEIGHT: 492.48

PURITY: >98% by TLC

STORAGE TEMPERATURE: 4°C in the dark for lyophilized form and -20°C for solution (Avoid multipe freeze/thaw cycles).

STABILITY: 1 year in lyophilized form

REFERENCES: 1. Ellouz F, Adam A, Ciobaru R, Lederer E. Minimal structural requirements for adjuvant activity of

bacterial peptido glycan derivates. Biochem. Biophys. Res. Commun. 1974; 59: 1317-25.

2. S Kleinau, H Erlandsson, L. Klareskog. Percutaneous exposure of adjuvant oil causes arthritis in

DA rats. Clin Exp Immunol 96:281-284, 1994.