

Product Name: MNITMT

Catalog No.: 2492

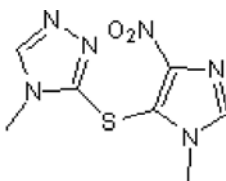
Batch No.: 1

CAS Number: 177653-76-8

IUPAC Name: 4-Methyl-3-[(1-methyl-4-nitro-1*H*-imidazol-5-yl)thio]-4*H*-1,2,4-triazole

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₇H₈N₆O₂S
Batch Molecular Weight: 240.24
Physical Appearance: Off-white solid
Solubility: water to 10 mM
DMSO to 20 mM
Storage: Store at +4°C
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.2 (Dichloromethane:Methanol [9:1])
Melting Point: Between 208 - 210°C
HPLC: Shows 99.2% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	35	3.36	34.98
Found	34.65	3.26	34.75

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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Description:

Novel, non-toxic immunosuppressive agent. Inhibits human mixed lymphocyte reaction in vitro ($ED_{50} = 2.7 \mu\text{M}$) and prolongs skin graft survival in mice. Produces a 98.1% reduction in antibody response following oral administration in rabbits. Previously sold as Cat. No. 0564.

Physical and Chemical Properties:

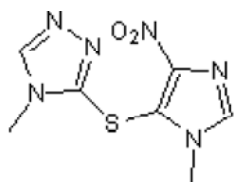
Batch Molecular Formula: $\text{C}_7\text{H}_8\text{N}_6\text{O}_2\text{S}$

Batch Molecular Weight: 240.24

Physical Appearance: Off-white solid

Minimum Purity: >99%

Batch Molecular Structure:



Storage: Store at +4°C

Solubility & Usage Info:

water to 10 mM

DMSO to 20 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Al-Safi et al (2003) Comparison of the effects of azathio. and its novel non-mercaptopurine analog on antibody response in rabbits. *Pol.J.Pharmacol.* **55** 239. PMID: 12926553.

Crawford et al (1996) Rational design of novel immunosuppressive drugs: analogues of azathio. lacking the 6-mercaptopurine substituent retain or have enhanced immunosuppressive effects. *J.Med.Chem.* **39** 2690. PMID: 8709098.

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