



LKT Laboratories, Inc.

Azathioprine

Phone: 888-558-5227
651-644-8424
Fax: 888-558-7329
Email: getinfo@lctlabs.com
Web: lctlabs.com

Product Information

Product ID A9803

CAS No. 446-86-6

Chemical Name 6-((1-methyl-4-nitroimidazol-5-yl)thio)purine; 6-((1-Methyl-4-nitro-1H-imidazol-5-yl)thio)purine; Imuran; Imurek; Imurel;
Methylnitroimidazolylmercaptapurine

Synonym AZA

Formula C₉H₇N₇O₂S

Formula Wt. 277.26

Melting Point 243-244° C(dec)

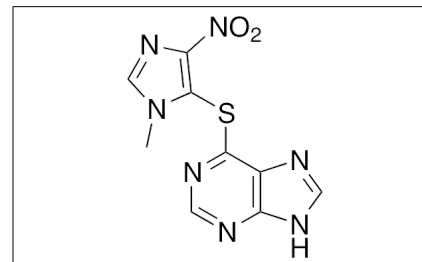
Purity ≥98%

Solubility Insoluble in water, slightly
soluble in ethanol, soluble
in DMSO.

Store Temp Ambient

Ship Temp Ambient

Description Azathioprine is a purine analog that acts as a prodrug of mercaptopurine. Azathioprine exhibits anticancer chemotherapeutic, immunosuppressive, and antiviral activities. Azathioprine inhibits amidophosphoribosyl transferase, inhibiting the production of adenine and guanine purines and preventing DNA synthesis. Azathioprine is clinically used to suppress the immune response in organ transplant subjects and is currently in clinical trials exploring its chemotherapeutic benefit. Azathioprine suppresses experimental autoimmune myasthenia gravis in animal models. In vitro, azathioprine downregulates expression of ANF-related apoptosis-inducing ligand and, separately, inhibits Vav activity on Rac GTPases, preventing conjugation of antigen-presenting cells (APCs) and T cells. Azathioprine also exhibits antiviral activity against bovine viral diarrhea virus.



Bulk quantities available upon request

Product ID	Size
A9803	1 g
A9803	5 g
A9803	10 g

References Hernández-Breijo B, Monserrat J, Ramírez-Rubio S, et al. Preclinical evaluation of azathioprine plus buthionine sulfoximine in the treatment of human hepatocarcinoma and colon carcinoma. *World J Gastroenterol*. 2011 Sep 14;17(34):3899-911. PMID: 22025878.

Hoover S, Striker R. Thiopurines inhibit bovine viral diarrhea virus production in a thiopurine methyltransferase-dependent manner. *J Gen Virol*. 2008 Apr;89(Pt 4):1000-9. PMID: 18343842.

Poppe D, Tiede I, Fritz G, et al. Azathioprine suppresses ezrin-radixin-moesin-dependent T cell-APC conjugation through inhibition of Vav guanosine exchange activity on Rac proteins. *J Immunol*. 2006 Jan 1;176(1):640-51. PMID: 16365460.

Fuchs S, Bartfeld D, Eshhar Z, et al. Immune regulation of experimental myasthenia. *J Neurol Neurosurg Psychiatry*. 1980 Jul;43(7):634-43. PMID: 7400824.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.