



LKT Laboratories, Inc.

Penicillin G procaine

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

Product Information

Product ID P1852

CAS No. 6130-64-9

Chemical Name (2S,5R,6R)-3,3-Dimethyl-7-oxo-6-[(phenoxyacetyl)-amino]-4-Thia-1-azabicyclo[3.2.0]heptane-2-carboxylic acid with 2-(diethylamino)ethyl 4-aminobenzoate (1:1) monohydrate

Synonym Benzylpenicillin Procaine salt, Abbocillin, Duracillin, Pfizerpen-AS

Formula C₂₉H₃₈N₄O₆S · H₂O

Formula Wt. 588.73

Melting Point 106-110 °C (dec)

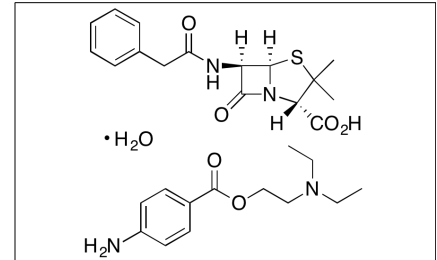
Purity ≥98%

Solubility Soluble at about 28°C in: water (6.8mg/mL), methanol (>20mg/mL), ethanol (33 mg/mL), and isopropanol

Store Temp Ambient

Ship Temp Ambient

Description Penicillin G is a hydrophobic β-lactam antibiotic that displays antibacterial efficacy against gram positive bacteria. Penicillin G is more active than penicillin V against gram negative bacteria but exhibits poor oral absorption kinetics and must be administered by parenteral injection. Penicillin G inhibits cell wall synthesis and does not display effective inhibition of β-lactamase-producing bacteria. Penicillin G may induce open channel or competitive block of neuromuscular nicotinic acetylcholine receptors (nAChRs).



Bulk quantities available upon request

Product ID	Size
P1852	10 g
P1852	25 g
P1852	100 g

References Sun S, Selmer M, Andersson DI. Resistance to β-lactam antibiotics conferred by point mutations in penicillin-binding proteins PBP3, PBP4 and PBP6 in *Salmonella enterica*. *PLoS One*. 2014 May 8;9(5):e97202. PMID: 24810745.

Schlesinger F, Krampfl K, Haeseler G, et al. Competitive and open channel block of recombinant nAChR channels by different antibiotics. *Neuromuscul Disord*. 2004 May;14(5):307-12. PMID: 15099589.

Demain AL. Production of beta-lactam antibiotics and its regulation. *Proc Natl Sci Council Repub China B*. 1991 Oct;15(4):251-65. PMID: 1815263.

Bär H, Zarnack J. Molecular-biological bases of the mechanism of action of penicillins and cephalosporins. *Pharmazie*. 1970 Jan 1;25(1):10-22. PMID: 4987180.

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