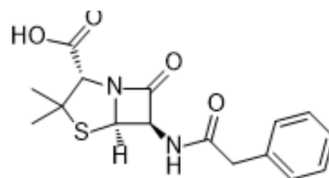


Penicillin G

Cat. No.:	HY-N7139
CAS No.:	61-33-6
Molecular Formula:	C ₁₆ H ₁₈ N ₂ O ₄ S
Molecular Weight:	334.39
Target:	Antibiotic; Bacterial
Pathway:	Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Penicillin G is a potent penicillin antibiotic. Penicillin G can be used for bacterial infection. Penicillin G has potent activity against all Gram-positive bacteria and Gram-negative cocci ^{[1][2]} .
IC₅₀ & Target	β-lactam
In Vitro	Penicillin G (16-128 μg/mL, 0-20 h) is used in combination with promethazine (32 μg/mL) to inhibit the growth and viability of <i>E. coli</i> ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Theranostics. 2022 Jan 1;12(3):1187-1203.
- Cancer Res. 2023 Feb 6;CAN-22-3169.
- EBioMedicine. 2022 Apr;78:103943.
- Chemosphere. 2019 Jun;225:378-387.
- Int Immunopharmacol. 2024 Jan 16;128:111524.

See more customer validations on www.MedChemExpress.com

REFERENCES

- [1]. Li D, et al. Determination of penicillin G and its degradation products in a penicillin production wastewater treatment plant and the receiving river. *Water Res.* 2008 Jan;42(1-2):307-17.
- [2]. Lehtinen J, et al. Promethazine renders *Escherichia coli* susceptible to penicillin G: real-time measurement of bacterial susceptibility by fluoro-luminometry. *Int J Antimicrob Agents.* 2007 Jul;30(1):44-51.

Caution: Product has not been fully validated for medical applications. For research use only.

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