

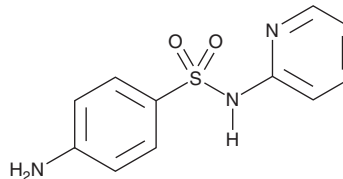
PRODUCT INFORMATION



Sulfapyridine

Item No. 28619

CAS Registry No.: 144-83-2
Formal Name: 4-amino-N-2-pyridinyl-benzenesulfonamide
Synonyms: NSC 41791, NSC 4753, Sulphapyridine
MF: C₁₁H₁₁N₃O₂S
FW: 249.3
Purity: ≥98%
UV/Vis.: λ_{max}: 270 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Description

Sulfapyridine is a sulfonamide antibiotic with antibacterial and anti-inflammatory activities.¹ It is also a metabolite of sulfasalazine (Item No. 15025) formed through bacterial conversion in the colon.² It is active against strains of *Y. enterocolitica* and *Salmonella* (MICs = 3.1-25 and 25-100 µg/ml, respectively), as well as *S. aureus* with a minimum bacteriostatic concentration (MBC) of 0.8 µM.^{3,4} It is an inhibitor of recombinant *P. carinii* dihydropteroate synthetase (DHPS; IC₅₀ = 0.18 µM).⁵ Sulfapyridine scavenges peroxy radicals in an oxygen radical absorbance capacity (ORAC) assay.² It inhibits histamine release induced by compound 48/80 (Item No. 22173) from isolated rat peritoneal mast cells in a dose-dependent manner.⁶ Sulfapyridine (1 µg/kg) also inhibits compound 48/80-induced systemic allergic reaction in rats. Formulations containing sulfapyridine have previously been used in the treatment of dermatological conditions and ulcerative colitis.

References

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3. Andreasen, J.J., Andersen, L.P., and Hartzen, S.H. *In vitro* susceptibility of diarrhoea producing gram negative enteric bacteria to sulfasalazine, 5-aminosalicylic acid, sulfapyridine and four quinolones. Brief report. *APMIS* **96(6)**, 568-570 (1988).
4. Wood, W.B. and Austrian, R. Studies on the antibacterial action of the sulfonamide drugs: II. The possible relation of drug activity to substances other than p-aminobenzoic acid. *J. Exp. Med.* **75(4)**, 383-394 (1942).
5. Hong, Y.-L., Hossler, P.A., Calhoun, D.H., *et al.* Inhibition of recombinant *Pneumocystis carinii* dihydropteroate synthetase by sulfa drugs. *Antimicrob. Agents Chemother.* **39(8)**, 1756-1763 (1995).
6. Kim, H.-M., An, N.-H., Yi, B.-H., *et al.* Inhibitory effect of mast cell-mediated immediate-type allergic reactions by sulfapyridine. *Immunopharmacol. Immunotoxicol.* **22(2)**, 253-266 (2000).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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