Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

Ampicillin (sodium)

Catalog No: tcsc2742

Available Sizes

Size: 1g

Size: 5g

Specifications

CAS No:
69-52-3

Formula:
$C_{16}H_{18}N_3NaO_4S$

Pathway:
Anti-infection

Target:
Antibiotic; Bacterial

Form:
White to off-white (Solid)

Purity / Grade:
≥98.0%

Solubility:
H2O : ≥ 200 mg/mL (538.53 mM); DMSO : 200 mg/mL (538.53mM; Need ultrasonic)

Storage Instruction:
2-8°C, sealed storage, away from moisture

Alternative Names:
D-(-)-α-Aminobenzylpenicillin sodium salt

Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

Observed Molecular Weight:
371.38

References

[1]. Chopra SL, et al. Effect of Ampicillin on E. Coli of Swine Origin. Can J Comp Med Vet Sci. 1963 Sep;27(9):223-7. [2]. Lund B, et al. Ampicillin in portal and peripheral blood and bile after oral administration of ampicillin andpivampicillin. Eur J Clin Pharmacol. 1974;7(2):133-5. [3]. Lee KE, et al. The neuroprotective mechanism of ampicillin in a mouse model of transient forebrain ischemia. Korean J Physiol Pharmacol. 2016 Mar;20(2):185-92

Product Description

Ampicillin sodium is a broad-spectrum beta-lactam antibiotic against a variety of gram-positive and gram-negative **bacteria**.

IC50 & Target: Bacterial[1]

In Vitro: Ampicillin inhibits the growth of *E. coli* of swine origin in a dose-dependent manner. The effective inhibitory concentration of Ampicillin was 2.5 uG/mL[1].

In Vivo: Ampicillin is very effective in alleviating the symptoms of hemorrhagic enteritis in a 11-week old pig[1]. Ampicillin produces maximum concentrations in bile twice as high as in serum. The peak concentration of ampicillin after an oral dose is as twice as high in portal blood as in peripheral blood[2]. Ampicillin provides neuroprotection against ischemia-reperfusion brain injury. Ampicillin reduces the activities of MMPs and increases the expression level of GLT-1. Pretreatment with ampicillin significantly reduces medial hippocampal cell death following global forebrain ischemia[3].