

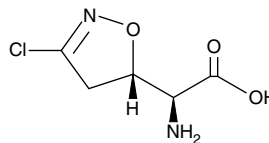
Product Information



Acivicin

Item No. 14003

CAS Registry No.: 42228-92-2
Formal Name: α S-amino-3-chloro-4,5S-dihydro-5-isoxazoleacetic acid
Synonyms: Antibiotic AT-125, NSC 163501, U 42126
MF: C₅H₇ClN₂O₃
FW: 178.6
Purity: \geq 98%
Stability: \geq 2 years at -20°C
Supplied as: A crystalline solid
UV/Vis.: λ_{max} : 219 nm



Laboratory Procedures

For long term storage, we suggest that acivicin be stored as supplied at -20°C. It should be stable for at least two years.

Acivicin is supplied as a crystalline solid. Organic solvent-free aqueous solutions of acivicin can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of acivicin in PBS, pH 7.2, is approximately 1.4 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Acivicin is a glutamine analog that irreversibly inhibits glutamine-dependent amidotransferases involved in nucleotide and amino acid biosynthesis (K_i 's = 10 and 560 μ M for anthranilate synthase and glutamate synthase, respectively).^{1,2} It also reversibly inhibits γ -glutamyl transpeptidase.^{3,4} Acivicin has been used to elucidate aspects of glutathione metabolism and has known anti-tumorigenic activity.^{2,5-7}

References

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6. Meck, R.A., Clubb, K.J., Allen, L.M., *et al.* Inhibition of cell cycle progression of human pancreatic carcinoma cells *in vitro* by L-(α S,5S)- α -amino-3-chloro-4,5-dihydro-5-isoxazoleacetic acid, acivicin (NSC 163501). *Cancer Res.* **41**, 4547-4553 (1981).
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Related Products

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WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

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