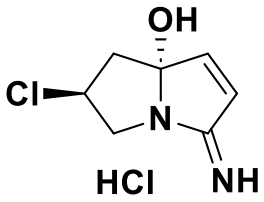
PRODUCT DATA SHEET

Clazamycin A (hydrochloride) (Antibacterial, antitumor)



Specifications

Code No.	: 16715
CAS#	: 71743-75-4
Molecular Formula	: $C_7H_9ClN_2O$ HCl
Molecular Weight	: 209.070
Source	: *Streptomyces* sp.
Supplied as	: Powder
Purity	: >95 % (HPLC)
Long Term Storage	: at -20 °C , under argon atmosphere
Solubility	: Soluble in H_2O and DMSO Slightly soluble in MeOH

The chemical structure was confirmed by NMR and HRMS.

Application Notes

Clazamycins A and B were isolated from culture filtrates of *Streptomyces* No. MF990-BF4 and the structure of clazamycin A was determined by X-ray diffraction methods.[1-2)] Clazamycins exist in aqueous solution as an epimeric mixture of clazamycins A and B.[1-3)] Clazamycins had weak antibacterial activity and inhibited leukemia L-1210 in mice.[1)]

Note: Clazamycin B is contained (< 5%) as an equilibrium isomer of clazamycin A. The ratio of clazamycin A and B is pH dependent.[1)] It is recommended to resolve into acidic solution (recommended pH is < 3) due to avoid equilibration and decomposition. The stock solution should be stored at 4°C or lower, and should be used within a couple of days.

References

1) New antibiotics, clazamycins A and B. Horiuchi Y, *et al*. *J Antibiot*. 1979 **32**(7) 762-764.
2) Crystal and molecular structure of clazamycin A. Nakamura H, *et al*. *J Antibiot*. 1979 **32**(7) 765-767.
3) Studies on the pyrrolizidine antitumor agent, clazamycin: interconversion of clazamycins A and B. Buechter D D. *et al*, *J Nat Prod.* 1987 **50**(3) 360-367.