Isochlortetracycline
Item No. 22125

CAS Registry No.: 514-53-4
Formal Name: (4S,4aS,6S,8aS)-6-[(1S)-7-chloro-1,3-dihydro-4-hydroxy-1-methyl-3-oxo-1-isobenzofuranyl]-4-(dimethylamino)-1,4,4a,5,6,7,8,8a-octahydro-3,8a-dihydroxy-1,8-dioxo-2-naphthalenecarboxamide
Synonyms: 7-Chloroisotetracycline, Isoaureomycin
MF: C22H23ClN2O8
FW: 478.9
Purity: ≥95%
Supplied as: A solid
Storage: -20°C
Stability: ≥2 years

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

Laboratory Procedures

Isochlortetracycline is supplied as a solid. A stock solution may be made by dissolving the isochlortetracycline in the solvent of choice. Isochlortetracycline is soluble in organic solvents such as ethanol, methanol, DMSO, and dimethyl formamide, which should be purged with an inert gas.

Description

Isochlortetracycline is an inactive alkaline degradation product of the broad-spectrum antibiotic chlortetracycline.1,2 This molecule appears to be a product of in vivo chlortetracycline metabolism with epimerization rates exceeding >50%, and high levels can be detected in the yolks of eggs from chickens exposed to this antibiotic.3 Isochlortetracycline is used as a reference standard in chromatographic analyses of chlortetracycline and its metabolic derivatives.2

References