PRODUCT INFORMATION

Ceftriaxone (sodium salt hydrate)
Item No. 18866

CAS Registry No.: 104376-79-6
Formal Name: (6R,7R)-7-[(2Z)-2-(2-amino-4-thiazolyl)-2-(methoxyimino)acetyl]amino]-8-oxo-3-[[1,2,5,6-tetrahydro-2-methyl-5,6-dioxo-1,2,4-triazin-3-yl]thio][methyl]-5-thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylic acid, disodium salt, hemiheptahydrate

Synonyms: Ro 13-9904, Rosihlitazone
MF: C_{18}H_{16}N_{8}O_{7}S_{3} • 2Na [3.5H_{2}O]
FW: 661.6
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis.: λ_{max}: 241 nm

Laboratory Procedures

For long term storage, we suggest that ceftriaxone (sodium salt hydrate) be stored as supplied at -20°C. It should be stable for at least two years.

Ceftriaxone (sodium salt hydrate) is supplied as a crystalline solid. Ceftriaxone (sodium salt hydrate) is sparingly soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. For biological experiments, we suggest that organic solvent-free aqueous solutions of ceftriaxone (sodium salt hydrate) be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of ceftriaxone (sodium salt hydrate) in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Ceftriaxone (sodium salt hydrate) is a third-generation, broad-spectrum cephalosporin antibiotic that disrupts the synthesis of the peptidoglycan layer of bacterial cell walls.\(^1\)\(^-\)\(^3\) It has been shown to increase excitatory amino acid transporter-2 pump expression in the central nervous system and to reduce glutamatergic toxicity in both in vitro and in vivo models.\(^4\)

References