Minocycline (hydrochloride)
Item No. 14454

CAS Registry No.: 13614-98-7
Formal Name: (4S,12aS)-4,7-bis(dimethylamino)-1,4,4aS,5,5aR,6,11,12a-octahydro-3,10,12,12a-tetrahydroxy-1,11-dioxo-2-naphthacenecarboxamide, monohydrochloride
Synonym: NSC 141993
MF: C_23H_27N_3O_7 • HCl
FW: 493.9
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis.: λ_max: 257, 342 nm

Laboratory Procedures
For long term storage, we suggest that minocycline (hydrochloride) be stored as supplied at -20°C. It should be stable for at least two years.

Minocycline (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the minocycline (hydrochloride) in the solvent of choice. Minocycline (hydrochloride) is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of minocycline (hydrochloride) in these solvents is approximately 5 and 10 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of minocycline (hydrochloride) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of minocycline (hydrochloride) in PBS, pH 7.2, is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Minocycline is a broad-spectrum tetracycline antibiotic which has a particularly long half-life in serum. It is commonly used in the treatment of acne in older patients. Minocycline also has both anti-inflammatory and neuroprotective actions.2,3

References

Related Products
For a list of related products please visit: www.caymanchem.com/catalog/14454

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

SAFETY DATA
This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent to your institution.

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