Amiloride hydrochloride hydrate

Product Number A 7410
Store at Room Temperature

Product Description
Molecular Formula: C₆H₈ClN₇O • HCl (anhydrous)
Molecular Weight: 266.1
CAS Number: 2016-88-8
pKₐ: 8.7
Melting Point: 285-288 °C (decomposition)
Extinction coefficient: E¹% (water) = 642 (212 nm), 555 (285 nm), 617 (362 nm)

Amiloride has been shown to inhibit the epidermal growth factor (EGF)-induced pH changes in chicken granulosa and other cells and thus suggesting that EGF may increase intracellular pH by activating the Na⁺/H⁺ anti-porter system. Amiloride (0.1 mM) prevented endothelin-induced increase in intracellular pH.

Amiloride was found to interact with adenosine A1 receptors in calf brain at a site distinct from the ligand binding site. It is a specific reversible inhibitor of sodium transport and blocks the Na⁺/H⁺ exchange pathway.

It is an inhibitor of urokinase-type plasminogen activator.

Precautions and Disclaimer
For Laboratory Use Only. Not for drug, household or other uses.

Preparation Instructions
The product is soluble in hot water (50 mg/ml), yielding a clear, yellow-green solution. Amiloride is freely soluble in DMSO; slightly soluble in isopropanol and ethanol; practically insoluble in acetone, chloroform, diethyl ether, and ethyl acetate.

Storage/Stability
A stock solution of amiloride in DMSO can be stored at -20 °C.

References

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