Product Information

5-(N-ethyl-N-isopropyl)-Amiloride
Item No. 14406

CAS Registry No.: 1154-25-2
Formal Name: 3-amino-N-(aminoiminomethyl)-6-chloro-5-[ethyl(1-methylethyl)amino]-2-pyrazinecarboxamide
Synonyms: EPIA, L-593,754, MH 12-43

**References**

**Laboratory Procedures**
For long term storage, we suggest that 5-(N-ethyl-N-isopropyl)-amiloride (EPIA) be stored as supplied at -20°C. It should be stable for at least two years.

EPIA is supplied as a crystalline solid. A stock solution may be made by dissolving the EPIA in the solvent of choice. EPIA is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of EPIA in these solvents is approximately 2, 14, and 20 mg/ml, respectively.

EPIA is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, EPIA should first be dissolved in DMF and then diluted with the aqueous buffer of choice. EPIA has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF-PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Sodium-hydrogen exchangers (NHE) are involved in maintaining sodium and pH balance in a variety of tissues. They are also known as sodium-hydrogen antiporters and solute carrier family 9 members. EIPA is a potent inhibitor of several NHE isoforms, inhibiting NHE1, NHE2, NHE3, and NHE5 with Ki values of 0.02, 0.5, 2.4, and 0.42 μM, respectively.1,2 It less effectively inhibits NHE4 (IC₅₀ ≥10 μM).1 EIPA is commonly used at a concentration of 5-10 μM to inhibit cellular HNE activity.3,4

**References**

**Related Products**
For a list of related products please visit: www.caymanchem.com/catalog/14406