PRODUCT SPECIFICATION

5-Amino-1MQ 50 mg

5-amino-1-methylquinolinium — a small-molecule inhibitor of nicotinamide N-methyltransferase (NNMT), supplied as a lyophilized research compound.

CAS NUMBER	MOLECULAR WEIGHT	PURITY	PHYSICAL FORM
42464-96-0	286.11 g/mol (iodide)	≥ 98% (HPLC)	Lyophilized powder

1 PRODUCT IDENTIFICATION

Product Name	5-Amino-1MQ 50 mg
Product Code	PCR-A1MQ-50
Compound Type	Small molecule — quaternary quinolinium; not a peptide
IUPAC Name	1-Methylquinolin-1-ium-5-amine iodide
Synonyms / Other Names	5-Amino-1MQ; 5-Amino-1-methylquinolinium iodide; NNMTi
Molecular Target	Nicotinamide N-methyltransferase (NNMT)
Vial Contents	50 mg lyophilized powder, single vial
Research Category	Metabolic research compound

2 CHEMICAL AND PHYSICAL PROPERTIES

CAS Number	42464-96-0 (iodide salt)
PubChem CID	950107 (cation)
Molecular Formula	$C_{10}H_{11}N_2^+$ (cation) | $C_{10}H_{11}IN_2$ (iodide salt)
Molecular Weight	159.21 g/mol (cation) | 286.11 g/mol (iodide salt)
Salt Form	Supplied as the iodide salt; the quinolinium nitrogen is permanently quaternised and therefore always carries a counter-ion
InChIKey	JPEZFBFIRRAFNR-UHFFFAOYSA-N
Appearance	Coloured crystalline powder — see note below
Physical State	Lyophilized solid
Purity	≥ 98% by HPLC

Note on appearance: reference suppliers describe the iodide salt as faint red to dark brown. Confirm the colour of your lot against its Certificate of Analysis before relying on appearance as an identity check.

RESEARCH USE ONLY — NOT FOR HUMAN OR VETERINARY USE. This document is not a Certificate of Analysis; batch-specific data is issued per lot.

3 SOLUBILITY AND RECONSTITUTION

Solubility	Soluble in water and in DMSO; approximately 2 mg/mL in DMSO as reported for the iodide salt
Recommended Diluent	Water or DMSO, depending on the research protocol; bacteriostatic water is supplied complimentary with every order
Solution Handling	Prepare fresh, keep cold, and avoid repeated freeze-thaw cycles

4 STORAGE AND STABILITY

Storage — Sealed Vial	Freeze at ≤ −20 °C, sealed, away from light and moisture
Shelf Life — Sealed	Approximately 24 months under recommended storage conditions
Storage — After Reconstitution	Refrigerate at 2–8 °C
In-Use Period	28–30 days after reconstitution
Conditions to Avoid	Heat, direct light, moisture, and repeated freeze-thaw cycles

5 QUALITY ASSURANCE AND DOCUMENTATION

Analytical Method	Reverse-phase high-performance liquid chromatography (HPLC)
Batch Testing	Independent third-party analysis for identity, purity, and contaminants
Certificate of Analysis	Issued per batch — available at peptidescostarica.net/lab-tests-coa-results/
Batch / Lot Number	Refer to the vial label and the accompanying Certificate of Analysis

6 INTENDED USE AND REGULATORY STATUS

Intended Use	Research Use Only (RUO) — laboratory, analytical, and scientific applications
Uses Advised Against	Not for human or veterinary use. Not a drug, food, cosmetic, dietary supplement, or household product. Not for diagnostic or therapeutic use.
Regulatory Status	Not approved or licensed by the U.S. FDA, the EMA, or Costa Rica's Ministerio de Salud for any use. The published evidence base is preclinical — cell culture and rodent models, with no controlled human trials of this compound.
Distribution	Supplied within Costa Rica

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DOCUMENTATION
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COA database:
/lab-tests-coa-results/

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