

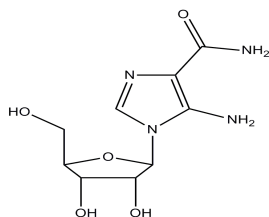
AICAR

ALTERNATE NAME: 5-Aminoimidazole-4-carboxamide 1- β -D-ribofuranoside;
AICA-Riboside; NSC 105823

CATALOG #: 1687-50, 250

AMOUNT: 50 mg, 250 mg

STRUCTURE:



MOLECULAR FORMULA: C₉H₁₄N₄O₅

MOLECULAR WEIGHT: 258.23

CAS NUMBER: 2627-69-2

APPEARANCE: Tan powder

SOLUBILITY: H₂O

PURITY: >98% by HPLC

STORAGE: Store at -20°C.

DESCRIPTION: A cell-permeable activator of AMP-activated protein kinase (AMPK), a metabolic sensor involved in both cellular and whole body energy homeostasis. *In vivo*, pharmacologic activation of AMPK with AICAR mimics exercise and triggers insulin-independent glucose uptake by skeletal muscle. AICAR is able to activate the molecular circuitry of pluripotency in mESC and to induce the expression of several key regulators of pluripotency in somatic cells.

REFERENCES: Adamo, L., *et al.* *BMC Pharmacology* (2009) **9**:2;
Giri, S., *et al.* (2004). *J. Neurosci.* **24**, 479-484;
Hayashi, T., *et al.* (1998). *Diabetes* **47**, 1369-1373.

HANDLING: Do not take internally. Wear gloves and mask when handling the product!
Avoid contact by all modes of exposure.

RELATED PRODUCTS:

A769662 (**Cat. No. 1719-5**)

Cordycepin (**Cat. No. 2078-10, 50**)

Dorsomorphin (**Cat. No. 1686-5**)

Metformin Hydrochloride (**Cat. No. 1691-5G**)

Phenformin hydrochloride (**Cat. No. 1889-100, 1000**)

FOR RESEARCH USE ONLY! Not to be used in humans.