

# AICAR, AMPK activator

| Catalog         | Unit   |
|-----------------|--------|
| TBI1092 - 50MG  | 50 mg  |
| TBI1092 - 250MG | 250 mg |

### **Product Details**

**Formal Name:** 5-Aminoimidazole-4-carboxamide 1-β-D-ribofuranoside.

Alternate Name: Acadesine. Molecular Formula: C<sub>9</sub>H<sub>14</sub>N<sub>4</sub>O<sub>5</sub>. Formula Weight: 258.2.

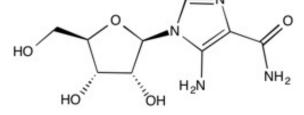
CAS Number: 2627-69-2

**Purity:** ≥98%

Formulation: Powder.

**Solubility:** Soluble in DMSO or water (up to 15 mg/ml).

Storage: -20°C. Stability:  $\geq 2$  years.



### **Applications**

AMPK activator.

## **Functions**

AICAR activates AMP-activated protein kinase (AMPK), and promotes ligand-independent activation of the insulin receptor. It also promotes skeletal muscle autophagy via activation of FoxO3a, and controls smooth muscle cell hyperproliferation in vascular disease. AICAR induces osteogenic differentiation in mesenchymal stem cells. It inhibits proinflammatory response in glial cells. AICAR is cell permeable.

#### **Application Procedures**

AICAR can be first dissolved in DMSO or water (up to 15 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20°C for up to 3 months.

### **Relative Products**

| TBI2438  | EHNA Hydrochloride, PDE2 and ADA Inhibitor |
|----------|--|
| TBI12069 | Cytochalasin B                             |
| TBI2073  | Forskolin, Adenylate cyclase activator     |
| TBI1286  | Bestatin, Aminopeptidase inhibitor         |
| TBI1126  | Vinpocetine, PDE1 Inhibitor                |
| TBI2657  | Roflumilast, PDE4 Inhibitor                |
| TBI1319  | BML-288, PDE2 Inhibitor                    |
| TBI2584  | Cilostamide, PDE3 Inhibitor                |
| TBI1131  | Cilostazol, PDE3A Inhibitor                |

### For research use only.