

Catalog	Unit
TBI2469 - 5G	5 g
TBI2469 - 25G	25 g

Product Details

Formal Name: 1,1-Dimethylbiguanide hydrochloride.

Molecular Formula: C₄H₁₁N₅·HCl.

Formula Weight: 165.63.

CAS Number: 1115-70-4

Purity: ≥98%

Formulation: Powder.

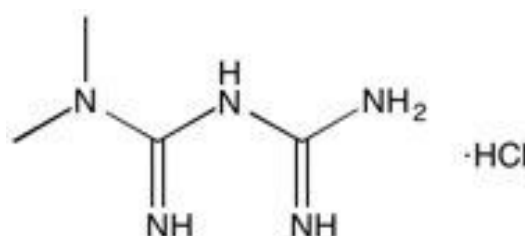
Solubility: Soluble in DMSO (up to 8 mg/ml) or in Water (up to 16 mg/ml).

Storage: Room temperature.

Stability: ≥ 2 years.

Applications

- Antidiabetic agent.
- Life extension agent.



Functions

Clinically useful antidiabetic agent. Lowers plasma glucose levels and improves insulin sensitivity. Inhibits hepatic gluconeogenesis by activation of the AMP-activated protein kinase (AMPK) pathway. Displays antiproliferative and pro-apoptotic actions in a variety of cancer cell lines. Induces autophagy via inhibition of the mTOR pathway. Activates PGC1 α and improves mitochondrial dynamics in renal tubular cells. Upregulates SIRT1 activity in endothelial cells. Neuroprotective and lowers a-synuclein phosphorylation in the Parkinson's disease MPTP mouse model.

Application Procedures

Metformin can be first dissolved in DMSO or water (up to 8 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20°C for up to 3 months.

Relative Products

TBI1092	AICAR, AMPK activator
TBI1029	Dorsomorphine, AMPK inhibitor
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

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