

BBT

Chemical Properties

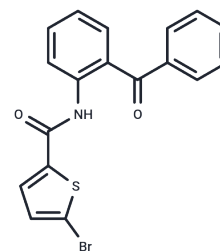
CAS No. : 445000-45-3

Formula: C₁₈H₁₂BrNO₂S

Molecular Weight: 386.26

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



Biological Description

Description	BBT has anti-hyperglycemic activity, acting through cAMP/PKA and the persistent L-type voltage-dependent Ca ²⁺ channels/CaMK2 pathways to protect β -cells from cytokine or streptozotocin (STZ)-induced cell death and restore β -cell function, used in studies of diabetes.
Targets(IC50)	Calcium Channel
In vitro	BBT stimulates insulin secretion in a glucose-dependent manner. BBT effectively reversed β cell death induced by treatment with STZ (0.4 mM) or cytokines (10 ng/ml TNF- α and 5 ng/ml IL1B) in a dose-dependent manner. BBT can reverse STZ or cytokine-induced GSIS defects. [1]
In vivo	BBT (50 mg/kg/day intravenously for 4 weeks) improved glucose homeostasis in STZ/HFD-induced type 2 diabetes mice. [1]

Solubility Information

Solubility	DMSO: 100 mg/mL (258.89 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.5889 mL	12.9446 mL	25.8893 mL
5 mM	0.5178 mL	2.5889 mL	5.1779 mL
10 mM	0.2589 mL	1.2945 mL	2.5889 mL
50 mM	0.0518 mL	0.2589 mL	0.5178 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Yao XG, et al. BBT improves glucose homeostasis by ameliorating β -cell dysfunction in type 2 diabetic mice. J Endocrinol. 2015 Mar;224(3):327-41.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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