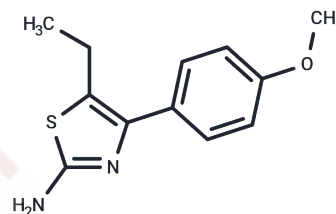


CBF β Inhibitor

Chemical Properties

CAS No. :	493028-20-9
Formula:	C ₁₂ H ₁₄ N ₂ O ₂ S
Molecular Weight:	234.32
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	CBF β Inhibitor (5-Ethyl-4-(4-methoxy-phenyl)-thiazol-2-ylamine) is a cell-permeable CBF β inhibitor and inhibits its association with Runx1.
Targets(IC50)	Others,DNA/RNA Synthesis
In vitro	The ELISA results have shown that CBF β Inhibitor is very effective in inhibiting the CBF β -Runx1 interaction (IC ₅₀ : 3.2 μ M). In the leukemia cell line ME-1 expressing CBF β -SMMHC, CBF β Inhibitor reduced cell proliferation dose-dependently. Treatment with CBF β Inhibitor for 3 days showed an increase in apoptotic cells. Treatment with CBF β Inhibitor for 14 days individually or with all-trans-retinoic acid (ATRA) resulted in cells with greater variation in size and shape, lower nuclear-to-cytoplasmic ratio, increased folding, and lobation of nuclei, and more clumped chromatin. All of these morphology changes are consistent with differentiation to more mature forms. CBF β Inhibitor at 50 μ M increased proliferation of Hep-G2 cells. CBF β treatment with Inhibitor resulted in a statistically significant reduction in Runx1 bound to DNA [1].

Solubility Information

Solubility	Ethanol: 25 mg/mL (106.69 mM),Sonication is recommended. DMSO: 55 mg/mL (234.72 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	4.2677 mL	21.3383 mL	42.6767 mL
5 mM	0.8535 mL	4.2677 mL	8.5353 mL
10 mM	0.4268 mL	2.1338 mL	4.2677 mL
50 mM	0.0854 mL	0.4268 mL	0.8535 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

Michael J Gorczynskir, et al. Allosteric inhibition of the protein-protein interaction between the leukemia-associated proteins Runx1 and CBFbeta. Chem Biol . 2007 Oct;14(10):1186-97.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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Tel: 781-999-4286 E_mail: info@targetmol.com Address: 34 Washington Street, Wellesley Hills, MA 02481