CBFβ Inhibitor
Item No. 16771

CAS Registry No.: 493028-20-9
Formal Name: 5-ethyl-4-(4-methoxyphenyl)-2-thiazolamine
Synonym: Core Binding Factor-B Inhibitor
MF: C12H14N2O3S
FW: 234.3
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis: λmax 239 nm

Laboratory Procedures
For long term storage, we suggest that CBFβ inhibitor be stored as supplied at -20°C. It should be stable for at least two years.

CBFβ inhibitor is supplied as a crystalline solid. A stock solution may be made by dissolving the CBFβ inhibitor in the solvent of choice. CBFβ inhibitor is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of CBFβ inhibitor in these solvents is approximately 25, 30, and 50 mg/ml, respectively.

CBFβ inhibitor is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CBFβ inhibitor should first be dissolved in DMF and then diluted with the aqueous buffer of choice. CBFβ inhibitor has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF/PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Core binding factors (CBFs) are heterodimeric transcription factors consisting of a DNA-binding CBFα component (a RUNX protein) and an enhancer of binding, CBFβ.1,2 CBF dimers have central roles in hematopoiesis and, when dysfunctional, in leukemias.1,2 CBFβ inhibitor is a small molecule that binds to CBFβ and inhibits its association with Runx1 (IC50 = 3.2 μM).3 It blocks CBFβ-Runx1 interactions in ME-1 cells, acute myeloid leukemia cells harboring dysfunctional CBFβ, reducing proliferation without toxicity.3

References

Related Products
For a list of related products please visit: www.caymanchem.com/catalog/16771

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY; NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent with your email to your institution.

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Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

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