

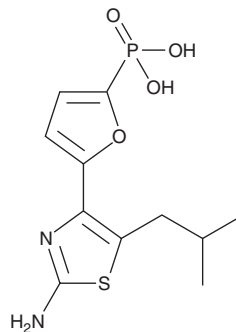
PRODUCT INFORMATION



MB-05032

Item No. 30924

CAS Registry No.: 261365-11-1
Formal Name: P-[5-[2-amino-5-(2-methylpropyl)-4-thiazolyl]-2-furanyl]-phosphonic acid
MF: C₁₁H₁₅N₂O₄PS
FW: 302.3
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

MB-05032 is supplied as a solid. A stock solution may be made by dissolving the MB-05032 in the solvent of choice, which should be purged with an inert gas. MB-05032 is soluble in the organic solvent DMSO.

Description

MB-05032 is an inhibitor of fructose-1,6-bisphosphatase (FBPase; IC₅₀s = 16 and 61 nM for human and rat liver FBPase, respectively).¹ It increases glucose utilization and enhances glucose-stimulated insulin release in MIN6 insulinoma cells when used at concentrations of 50, 100, and 200 μM.²

References

1. Dang, Q., Kasibhatla, S.R., Reddy, K.R., *et al.* Discovery of potent and specific fructose-1,6-bisphosphatase inhibitors and a series of orally-bioavailable phosphoramidase-sensitive prodrugs for the treatment of type 2 diabetes. *J. Am. Chem. Soc.* **129(50)**, 15491-15502 (2007).
2. Zhang, Y., Xie, Z., Zhou, G., *et al.* Fructose-1,6-bisphosphatase regulates glucose-stimulated insulin secretion of mouse pancreatic β-cells. *Endocrinology* **151(10)**, 4688-4695 (2010).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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