

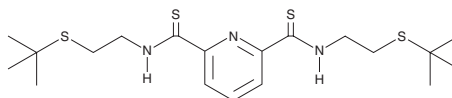
PRODUCT INFORMATION



HPH-15

Item No. 42819

CAS Registry No.: 1009838-93-0
Formal Name: N²,N⁶-bis[2-[(1,1-dimethylethyl)thio]ethyl]-2,6-pyridinedicarbothioamide
Synonym: HPH-8
MF: C₁₉H₃₁N₃S₄
FW: 429.7
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

HPH-15 is supplied as a solid. A stock solution may be made by dissolving the HPH-15 in the solvent of choice, which should be purged with an inert gas. HPH-15 is soluble (≥10 mg/ml) in ethanol and DMSO.

Description

HPH-15 is an antifibrotic compound and AMPK activator.^{1,2} It inhibits TGF-β1-induced collagen, fibronectin 1, and connective tissue growth factor (CTGF) production in primary human dermal fibroblasts when used at a concentration of 3 μM.¹ HPH-15 (10 μM) increases AMPK activation, glucose uptake, and membrane translocation of glucose transporter 4 (Glut4) in L6 rat myocytes expressing the human transporter.² It inhibits glucose-induced triglyceride production in HepG2 cells when used at a concentration of 50 μM. *In vivo*, HPH-15 (10 mg/kg) reduces blood glucose levels, increases AMPK activation, and suppresses hepatic fibrosis and lipid accumulation in mice fed a high-fat diet. It also decreases dermal thickness and inflammatory cell infiltration in a mouse model of fibrosis induced by bleomycin (Item No. 13877).¹

References

1. Luong, V.H., Chino, T., Oyama, N., *et al.* Blockade of TGF-β/Smad signaling by the small compound HPH-15 ameliorates experimental skin fibrosis. *Arthritis Res. Ther.* **20(1)**, 46 (2018).
2. Toma, T., Miyakawa, N., Arakaki, Y., *et al.* An antifibrotic compound that ameliorates hyperglycaemia and fat accumulation in cell and HFD mouse models. *Diabetologia* **67(11)**, 2568-2584 (2024).

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.

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