

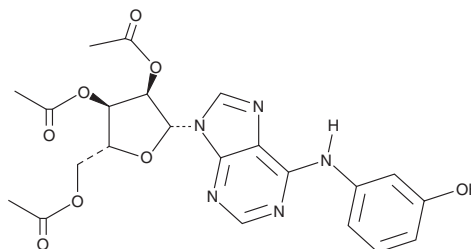
PRODUCT INFORMATION



IMM-H007

Item No. 38774

CAS Registry No.: 1221412-23-2
Formal Name: N-(3-hydroxyphenyl)-adenosine
2',3',5'-triacetate
MF: C₂₂H₂₃N₅O₈
FW: 485.5
Purity: ≥95%
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

IMM-H007 is supplied as a solid. A stock solution may be made by dissolving the IMM-H007 in the solvent of choice, which should be purged with an inert gas. IMM-H007 is soluble in acetonitrile and DMSO.

Description

IMM-H007 is an activator of AMP-activated protein kinase (AMPK) and an antagonist of TGF- β 1.^{1,2} It increases AMPK activity in HepG2 cell lysates when used at concentrations ranging from 1 to 100 μ M.¹ IMM-H007 binds to TGF- β 1 ($K_d = 0.2098 \mu$ M) and inhibits the binding of TGF- β 1 to TGF- β receptor type 2 (TGFBR2) when used at a concentration of 6 μ M.² It increases cholesterol efflux in THP-1 macrophages incubated with isolated mouse ApoB-depleted serum *ex vivo* when administered at a dose of 100 or 200 mg/kg.³ *In vivo*, IMM-H007 (18 mg/kg) decreases serum levels of triglycerides, total cholesterol, and LDL cholesterol, as well as hepatic lipid accumulation, in a hamster model of high-fat diet-induced hyperlipidemia.¹ IMM-H007 (200 mg/kg) decreases fibrotic area in wild-type and AMPK α 2 knockout mice in a model of cardiac fibrosis induced by the β -adrenergic receptor (β -AR) agonist isoprenaline (isoproterenol; Item No. 15592).² It decreases atherosclerotic lesion area in ApoE^{-/-} mice fed a Paigen diet.³

References

1. Lian, Z., Li, Y., Gao, J., *et al.* A novel AMPK activator, WS070117, improves lipid metabolism discords in hamsters and HepG2 cells. *Lipids Health Dis.* **10**, 67 (2011).
2. Wang, S.-X., Feng, Y.-N., Feng, S., *et al.* IMM-H007 attenuates isoprenaline-induced cardiac fibrosis through targeting TGF β 1 signaling pathway. *Acta Pharmacol. Sin.* **43(10)**, 2542-2549 (2022).
3. Huang, L., Fan, B., Ma, A., *et al.* Inhibition of ABCA1 protein degradation promotes HDL cholesterol efflux capacity and RCT and reduces atherosclerosis in mice. *J. Lipid Res.* **56(5)**, 986-997 (2015).

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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