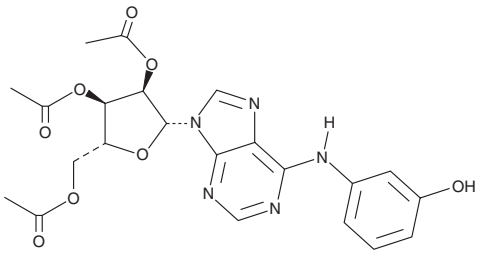
PRODUCT INFORMATION

IMM-H007

Item No. 38774

CAS Registry No.:	1221412-23-2
Formal Name:	N-(3-hydroxyphenyl)-adenosine 2′,3′,5′-triacetate
MF:	$C_{22}H_{23}N_5O_8$
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-β1.[1,2] It increases AMPK activity in HepG2 cell lysates when used at concentrations ranging from 1 to 100 µM.[1] IMM-H007 binds to TGF-β1 (K_d = 0.2098 µM) and inhibits the binding of TGF-β1 to TGF-β receptor type 2 (TGFBR2) when used at a concentration of 6 µM.[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 AMPKα2 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 TGFβ1 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).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM