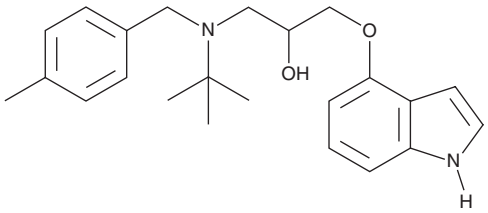
PRODUCT INFORMATION

SR 18292

Item No. 22084

CAS Registry No.:	2095432-55-4
Formal Name:	1-[(1,1-dimethylethyl)[(4-methylphenyl)methyl]amino]-3-(1H-indol-4-yloxy)-2-propanol
MF:	$C_{23}H_{30}N_2O_2$
FW:	366.5
Purity:	≥95%
UV/Vis.:	λ_{max}: 217, 267, 289 nm
Supplied as:	A crystalline 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

SR 18292 is supplied as a crystalline solid. A stock solution may be made by dissolving the SR 18292 in the solvent of choice, which should be purged with an inert gas. SR 18292 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of SR 18292 in ethanol is approximately 10 mg/ml and approximately 25 mg/ml in DMSO and DMF.

SR 18292 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, SR 18292 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. SR 18292 has a solubility of approximately 0.33 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

SR 18292 is an inhibitor of peroxisome proliferator-activated receptor-γ coactivator-1α (PGC-1α), a coactivator of transcription factors for genes involved in gluconeogenesis.[1] SR 18292 (20 µM) increases acetylation of PGC-1α and, subsequently, decreases mRNA expression of phosphoenolpyruvate carboxykinase 1 (PEPCK1/Pck1) and the glucose-6-phosphatase catalytic subunit (G6Pc) in primary hepatocytes following stimulation with glucagon. In a dietary model of type II diabetes mellitus in mice, SR 18292 (45 mg/kg, i.p., for four days) reduces fasting blood glucose levels and the expression of liver Pck1. It also enhances glucose tolerance and insulin sensitivity in two mouse models of obesity.

Reference

1. Sharabi, K., Lin, H., Tavares, C.D., *et al.* Selective chemical inhibition of PGC-1α gluconeogenic activity ameliorates Type 2 Diabetes. *Cell* **169(1)**, 148-160 (2017).

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