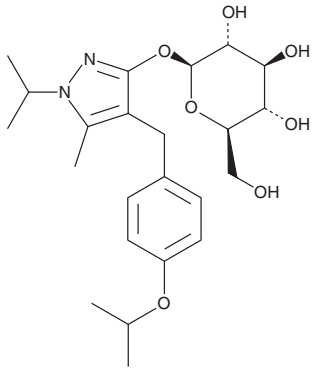
PRODUCT INFORMATION

Remogliflozin A

Item No. 14340

CAS Registry No.:	329045-45-6
Formal Name:	5-methyl-4-[[4-(1-methylethoxy) phenyl]methyl]-1-(1-methylethyl)-1H-pyrazol-3-yl β-D-glucopyranoside
Synonym:	GSK189074
MF:	$C_{23}H_{34}N_2O_7$
FW:	450.5
Purity:	≥98%
UV/Vis.:	λ_{max}: 229 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

Remogliflozin A is supplied as a crystalline solid. A stock solution may be made by dissolving the remogliflozin A in the solvent of choice. Remogliflozin A is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of remogliflozin A in these solvents is approximately 30 mg/ml.

Remogliflozin A is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, remogliflozin A should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Remogliflozin A has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Remogliflozin A is a potent inhibitor of sodium-glucose transporter 2 (SGLT2; K_is = 12.4 and 26 nM for human and rat SGLT2, respectively).[1] It is selective for SGLT2 over SGLT1 (K_is = 4,520 and 997 nM for human and rat SGLT1, respectively). Following administration of a prodrug, remogliflozin etabonate, that is rapidly converted to remogliflozin A *in vivo*, rat urinary glucose excretion increases and plasma glucose and insulin concentrations decrease. Similar effects are observed following oral administration of remogliflozin etabonate to rats with diabetes induced by streptozotocin (Item No. 13104) and *db/db* mice with hyperinsulinemia and obesity.

Reference

1. Fujimori, Y., Katsuno, K., Nakashima, I., *et al.* Remogliflozin etabonate, in a novel category of selective low-affinity sodium glucose cotransporter (SGLT2) inhibitors, exhibits antidiabetic efficacy in rodent models. *J. Pharmacol. Exp. Ther.* **327(1)**, 268-276 (2008).

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