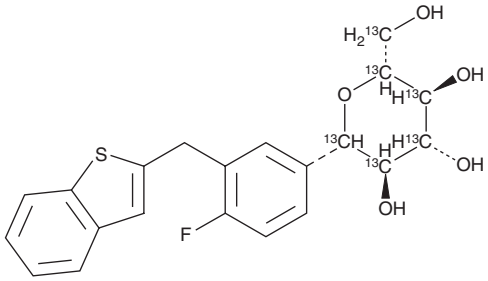
PRODUCT INFORMATION

Ipragliflozin-$^{13}C_6$

Item No. 28705

Formal Name:	(2S,3R,4R,5S,6R)-2-(3-(benzo[b]thiophen-2-ylmethyl)-4-fluorophenyl)-6-(hydroxymethyl-^{13}C)tetrahydro-2H-pyran-3,4,5-triol-2,3,4,5,6-$^{13}C_5$
MF:	$C_{15}[^{13}C]_6H_{21}FO_5S$
FW:	410.4
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

Ipragliflozin-$^{13}C_6$ is supplied as a solid. A stock solution may be made by dissolving the ipragliflozin-$^{13}C_6$ in the solvent of choice, which should be purged with an inert gas. Ipragliflozin-$^{13}C_6$ is soluble in methanol, DMSO, and dimethyl formamide.

Description

Ipragliflozin-$^{13}C_6$ is intended for use as an internal standard for the quantification of ipragliflozin (Item No. 22287) by GC- or LC-MS. Ipragliflozin is a sodium-glucose cotransporter 2 (SGLT2) inhibitor (IC_{50} = 7.4 nM in CHO cells expressing the human cotransporter).[1] It is selective for SGLT2 over SGLT1, SGLT3, SGLT4, SGLT5, and SGLT6 (IC_{50}s = 1.9, 30.4, 15.9, 0.46, and 10.4 µM, respectively). Ipragliflozin (0.1-3 mg/kg) decreases plasma levels of insulin and glucose in an oral glucose tolerance test in a mouse model of diabetes induced by high-fat diet, streptozotocin (STZ; Item No. 13104), and nicotinamide (Item No. 11127).[2] It decreases plasma and hepatic IL-6, TNF-α, chemokine (C-C motif) ligand 2 (CCL2), and C-reactive protein (CRP) levels in the same model when administered at a dose of 3 mg/kg per day for 28 days.

References

1. Takasu, T., Yokono, M., Tahara, A., *et al*. *In vitro* pharmacological profile of ipragliflozin, a sodium glucose co-transporter 2 inhibitor. *Biol. Pharm. Bull.* **42(3)**, 507-511 (2019).
2. Tahara, A., Kurosaki, E., Yokono, M., *et al*. Effects of SGLT2 selective inhibitor ipragliflozin on hyperglycemia, hyperlipidemia, hepatic steatosis, oxidative stress, inflammation, and obesity in type 2 diabetic mice. *Eur. J. Pharmacol.* **715(1-3)**, 246-255 (2013).

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