PRODUCT INFORMATION



Ipragliflozin-¹³C₆ 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 | H ₂ ¹³ C OH |
|--------------|--|---|
| MF: | C ₁₅ [¹³ C] ₆ H ₂₁ FO ₅ S | |
| FW: | 410.4 | / I I I I I I I I I I I I I I I I I I I |
| Purity: | ≥98% | |
| Supplied as: | A solid | F F |
| 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 $(IC_{50} = 7.4 \text{ nM} \text{ in CHO cells expressing the human cotransporter}).^1$ 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 μ M, 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).

Tahara, A., Kurosaki, E., Yokono, M., et al. Effects of SGLT2 selective inhibitor ipragliflozin on hyperglycemia, 2. hyperlipidemia, hepatic steatosis, oxidative stress, inflammation, and obesity in type 2 diabetic mice. Eur. J. Pharmacol. 715(1-3), 246-255 (2013).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFFTY 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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