PRODUCT INFORMATION

Ipragliflozin
Item No. 22287

CAS Registry No.: 761423-87-4
Formal Name: (1S)-1,5-anhydro-1-C-[3-(benzo[b]thien-2-ylmethyl)-4-fluorophenyl]-D-glucitol
Synonym: ASP1941
MF: C21H21FO5S
FW: 404.5
Purity: ≥98%
UV/Vis.: λmax: 231, 267 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

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

Ipragliflozin is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ipragliflozin should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Ipragliflozin has a solubility of approximately 0.13 mg/ml in a 1:7 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Ipragliflozin is a potent inhibitor of sodium-glucose cotransporter 2 (SGLT2; IC50 = 7.4 nM for human SGLT2 in vitro) that increases excretion of glucose.1 Inhibiting renal glucose reabsorption in this way offers an insulin-independent alternative to controlling blood glucose concentrations in patients with type 2 diabetes mellitus.2,3 Formulations containing ipragliflozin reduced plasma glucose and HbA1c levels as well as decreased body weight in a Phase III clinical trial.4

References