# PRODUCT INFORMATION



# **APD597**

Item No. 22950

CAS Registry No.: 897732-93-3

Formal Name: 4-[[5-methoxy-6-[[2-methyl-

> 6-(methylsulfonyl)-3-pyridinyl] amino]-4-pyrimidinyl]oxy]-1-piperidinecarboxylic acid,

1-methylethyl ester

Synonym: JNJ-38431055 MF:  $C_{21}H_{29}N_5O_6S$ 

479.6 FW: **Purity:** 

UV/Vis.:  $\lambda_{max}$ : 311 nm Supplied as: A crystalline solid

-20°C Storage: Stability: ≥4 years

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

## **Laboratory Procedures**

APD597 is supplied as a crystalline solid. A stock solution may be made by dissolving the APD597 in the solvent of choice, which should be purged with an inert gas. APD597 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of APD597 in ethanol is approximately 50 mg/ml and approximately 25 mg/ml in DMSO and DMF.

APD597 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, APD597 should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. APD597 has a solubility of approximately 0.25 mg/ml in a 1:3 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

## Description

APD597 is an orally bioavailable agonist of GPR119 that has EC<sub>50</sub> values of 46 and 421 nM for the human and rat receptors, respectively, in a homologous time-resolved fluorescence (HTRF) assay.<sup>1</sup> It increases insulin secretion stimulated by a high, but not low, concentration of glucose in isolated mouse pancreatic β-cells and in isolated human islets.<sup>2</sup> APD597 (20 mg/kg) increases levels of glucagon-like peptide-1 (GLP-1; Item No. 24460) induced by glucose in mice. It also decreases blood glucose levels in an oral glucose tolerance test in mice when administered at doses of 1 and 10 mg/kg and in Zucker diabetic rats at a dose of 3 mg/kg.1

## References

- 1. Semple, G., Lehmann, J., Wong, A., et al. Discovery of a second generation agonist of the orphan G-protein coupled receptor GPR119 with an improved profile. Bioorg. Med. Chem. Lett. 22(4), 1750-1755 (2012).
- 2. Huan, Y., Jiang, Q., Li, G., et al. The dual DPP4 inhibitor and GPR119 agonist HBK001 regulates glycemic control and beta cell function ex and in vivo. Sci. Rep. 7(1), 4351 (2017).

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

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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