# **PRODUCT** INFORMATION



## PSN375963

Item No. 10008593

CAS Registry No.:	388575-52-8
Formal Name:	4-[5-(4-butylcyclohexyl)-1,2,4-oxadiazol-
	3-yl]-pyridine
MF:	$C_{17}H_{23}N_{3}O$
FW:	285.4 N
Purity:	≥98%
UV/Vis.:	$\lambda_{max}$ : 224, 273 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

PSN375963 is supplied as a crystalline solid. A stock solution may be made by dissolving the PSN375963 in the solvent of choice, which should be purged with an inert gas. PSN375963 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of PSN375963 in ethanol and DMF is approximately 30 mg/ml and approximately 5 mg/ml in DMSO.

PSN375963 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, PSN375963 should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. PSN375963 has a solubility of approximately 0.25 mg/ml in a 1:2 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

#### Description

GPR119 (previously designated SNORF25) is an orphan G protein-coupled receptor expressed predominantly in the pancreas and gastrointestinal tract in humans and in the brain, pancreas, and gastrointestinal tract in rodents. It mediates a reduction in food intake and body weight gain in rats upon treatment with oleoyl ethanolamide (OEA), an endogenous, potent agonist for PPARo.<sup>1,2</sup> PSN375963 is a potent and selective agonist of GPR119 that shows similar potency to OEA at both recombinant mouse and human GPR119 receptors, exhibiting  $EC_{50}$  values of 8.4 and 7.9  $\mu$ M, respectively ( $EC_{50}$  values for OEA are 3.2 and 2.9  $\mu$ M, respectively).<sup>2</sup> These data suggest that PSN375963 may be useful as a therapeutic agent for the treatment of obesity.

#### References

- 1. Fu, J., Gaetani, S., Oveisi, F., et al. Oleylethanolamide regulates feeding and body weight through activation of the nuclear receptor PPAR-a. Nature 425, 90-93 (2003).
- 2. Overton, H.A., Babbs, A.J., Doel, S.M., et al. Deorphanization of a G protein-coupled receptor for oleoylethanolamide and its use in the discovery of small-molecule hypophagic agents. Cell Metablolism 3, 167-175 (2006).

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.

#### WARRANTY AND LIMITATION OF REMEDY

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