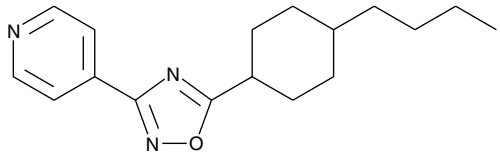
Product Information

PSN375963

Item No. 10008593

CAS Registry No.: 388575-52-8
Formal Name: 4-[5-(4-butylcyclohexyl)-1,2,4-oxadiazol-3-yl]-pyridine
MF: $C_{17}H_{23}N_3O$
FW: 285.4
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis.: λ_{max}: 224, 273 nm



Laboratory Procedures

For long term storage, we suggest that PSN375963 be stored as supplied at -20°C. It should be stable for at least two years.

PSN375963 is supplied as a crystalline solid. A stock solution may be made by dissolving the PSN375963 in an organic solvent 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.

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 PPARα.[1,2] 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 µM, respectively (EC_{50} values for OEA are 3.2 and 2.9 µM, respectively).[2] 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-α. *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).

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