



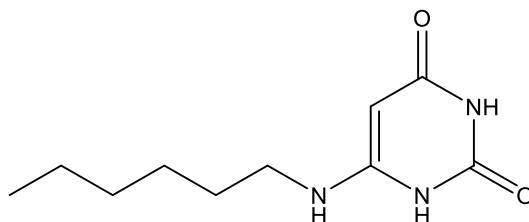
Catalog # 10-5373

PSB-1584

CAS# 72255-76-6

6-Hexylamino-2,4(1H,3H)-pyrimidinedione, 6-Hexylaminouracil

Lot # S106023



GPR84 is an orphan G protein-coupled receptor that is activated by medium-chain fatty acids and hydroxy fatty acids although these may not be its endogenous agonist.¹ It is highly expressed on immune cells and expression levels rise after exposure to inflammatory stimuli.² Potent synthetic agonists enhance proinflammatory signaling and macrophage effector functions.¹ PSB-1584 is a potent synthetic exogenous agonist at GPR84, $EC_{50}=5$ nM which is selective against other free fatty acid receptors and is metabolically stable when incubated with human liver microsomes.³ An important new tool for studying the physiology of GPR84.⁴

- 1) Luscombe *et al.* (2020), *20 Years an Orphan: Is GPR84 a Plausible Medium-Chain Fatty Acid-Sensing Receptor?*; DNA Cell Biol., **39** 1926
- 2) Marsango *et al.* (2020) *Therapeutic validation of an orphan G protein-coupled receptor: The case of GPR84*. Br. J. Pharmacol. Sept 1 (Online Ahead of Print)
- 3) Pilaiyar *et al.* (2018), *6-(Ar)Alkylamino-substituted Uracil Derivatives: Lipid Mimetics with Potent Activity at the Orphan G Protein-Coupled Receptor 84 (GPR84)*; ACS Omega, **3** 3365
- 4) Chen *et al.* (2020), *Modulation of the G-Protein-Coupled Receptor 84 (GPR84) by Agonists and Antagonists*; J. Med. Chem. **63** 15399

PHYSICAL DATA

| | |
|------------------------|--|
| Molecular Weight: | 211.26 |
| Molecular Formula: | C ₁₀ H ₁₇ N ₃ O ₂ |
| Purity: | 98% by TLC |
| | NMR: (Conforms) |
| Solubility: | DMSO (up to 35 mg/ml) |
| Physical Description: | Off-white solid |
| Storage and Stability: | Store as supplied desiccated at -20°C for up to 2 years from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 2 months. |

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