PRODUCT INFORMATION



6-OAU

Item No. 17687

CAS Registry No.: 83797-69-7

Formal Name: 6-(octylamino)-2,4(1H,3H)-pyrimidinedione

MF: $C_{12}H_{21}N_3O_2$

FW: 239.3 **Purity:** UV/Vis.: λ_{max} : 265 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

6-OAU is supplied as a crystalline solid. A stock solution may be made by dissolving the 6-OAU in the solvent of choice, which should be purged with an inert gas. 6-OAU is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of 6-OAU in these solvents is approximately 0.25 mg/ml.

Description

GPR84 is a $G\alpha$, protein-coupled receptor that is activated by medium-chain free fatty acids, but only at micromolar concentrations. GPR84 is expressed in leukocytes and its expression is further induced by LPS. 1,2 6-OAU is a synthetic agonist for GPR84 (EC $_{50}$ = 512 nM). 2 It has insignificant actions at a panel of 69 other receptors, channels, or transporters. 2 6-OAU promotes chemotaxis in human neutrophils $(EC_{50} = 318 \text{ nM})$ and amplifies TNF- α production by LPS-treated U937 macrophages.² In rats, 6-OAU (1 mg/ml) drives the recruitment of neutrophils and macrophages when injected into a subcutaneous air pouch and raises serum levels of CXCL1 (growth-regulated α protein) when delivered intravenously.²

References

- 1. Davenport, A.P., Alexander, S.P.H., Sharman, J.L., et al. International Union of Basic and Clinical Pharmacology. LXXXVIII. G protein-coupled receptor list: Recommendations for new pairings with cognate ligands. Pharmacol. Rev. 65(3), 967-986 (2013).
- 2. Suzuki, M., Takaishi, S., Nagasaki, M., et al. Medium-chain fatty acid-sensing receptor, GPR84, is a proinflammatory receptor. J. Biol. Chem. 288(15), 10684-10691 (2013).

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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