

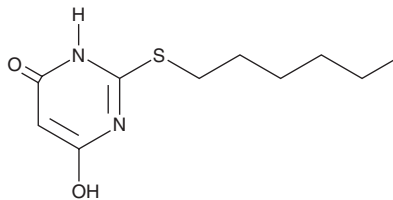
# PRODUCT INFORMATION



## ZQ-16

Item No. 43951

**CAS Registry No.:** 376616-73-8  
**Formal Name:** 2-(hexylthio)-6-hydroxy-4(3H)-pyrimidinone  
**Synonym:** 2-HTP  
**MF:** C<sub>10</sub>H<sub>16</sub>N<sub>2</sub>O<sub>2</sub>S  
**FW:** 228.3  
**Purity:** ≥98%  
**Supplied as:** A 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

ZQ-16 is supplied as a solid. A stock solution may be made by dissolving the ZQ-16 in the solvent of choice, which should be purged with an inert gas. ZQ-16 is slightly soluble (0.1-1 mg/ml) in acetonitrile.

ZQ-16 is slightly soluble (0.1-1 mg/ml) in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

### Description

ZQ-16 is an agonist of G protein-coupled receptor 84 (GPR84).<sup>1</sup> It induces calcium mobilization in HEK293 cells expressing GPR84 and G $\alpha_{16}$  (EC<sub>50</sub> = 0.213  $\mu$ M). ZQ-16 is selective for GPR84 over free fatty acid receptor 1 (FFAR1/GPR40), FFAR3/GPR41, GPR119, and FFAR4/GPR120 at 100  $\mu$ M. ZQ-16 also inhibits forskolin-induced cAMP accumulation and induces  $\beta$ -arrestin-2 recruitment in HEK293 cells expressing GPR84 (EC<sub>50</sub>s = 0.134 and 0.597  $\mu$ M, respectively). It induces the production of reactive oxygen species (ROS) in LPS-induced THP-1 cells differentiated by phorbol 12-myristate 13-acetate (PMA; Item No. 10008014) but not in LPS-induced isolated mouse bone marrow-derived macrophages (BMDMs).<sup>2</sup>

### References

1. Zhang, Q., Yang, H., Li, J., *et al.* Discovery and characterization of a novel small-molecule agonist for medium-chain free fatty acid receptor G protein-coupled receptor 84. *J. Pharmacol. Exp. Ther.* **357**(2), 337-344 (2016).
2. Schwarzfischer, M., Walker, M.R., Curcio, M., *et al.* Synthetic GPR84 agonists in colorectal cancer: Effective in THP-1 cells but ineffective in BMDMs and MC38 mouse tumor models. *Int. J. Mol. Sci.* **26**(2), 490 (2025).

#### WARNING

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

#### SAFETY 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.

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