

# PRODUCT INFORMATION



## Hexadecyl Acetyl Glycerol

Item No. 60920

**CAS Registry No.:** 77133-35-8  
**Formal Name:** 1-O-hexadecyl-2-O-acetyl-*sn*-glycerol  
**Synonym:** HAG  
**MF:** C<sub>21</sub>H<sub>42</sub>O<sub>4</sub>  
**FW:** 358.6  
**Purity:** ≥95% (as a 9:1 mixture of the 2-acetyl and 1-acetyl)  
**Supplied as:** A solution in methyl acetate  
**Storage:** -80°C  
**Stability:** ≥6 months



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Hexadecyl Acetyl Glycerol (HAG) is supplied as a solution in methyl acetate. To change the solvent, simply evaporate the methyl acetate under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol and DMSO purged with an inert gas can be used. HAG solubility in DMSO is approximately 10 mg/ml. HAG is miscible in ethanol.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. If an organic solvent-free solution of HAG is needed, it can be prepared by evaporating the acetonitrile and directly dissolving the neat oil in aqueous buffers. The solubility of HAG in PBS (pH 7.2) is approximately 150 µg/ml. Store aqueous solutions of HAG on ice and use within 12 hours of preparation. Although the aqueous solutions of HAG may be stable for more than 12 hours, we strongly recommend using a fresh preparation each day.

### Description

HAG is an analog of DAG, which inhibits the activation of PKC by DAG.<sup>1</sup> It also inhibits the growth of HL-60 cells and induces differentiation to cells resembling mononuclear phagocytes. Following treatment with 5 µg/ml HAG for six days, HL-60 cells demonstrated a 10-fold increase in non-specific esterase activity.<sup>2</sup>

### References

1. Daniel, L.W., Small, G.W., and Schmitt, J.D. Alkyl-linked diglycerides inhibit protein kinase C activation by diacylglycerols. *Biochem. Biophys. Res. Commun.* **151**, 291-297 (1988).
2. McNamara, M.J.C., Schmitt, J.D., Wykle, R.L., et al. 1-O-Hexadecyl-2-acetyl-*sn*-glycerol stimulates differentiation of HL-60 human promyelocytic leukemia cells to macrophage-like cells. *Biochem. Biophys. Res. Commun.* **122**, 824-830 (1984).

#### 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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