

PRODUCT INFORMATION



DDG

Item No. 24778

CAS Registry No.: 2350271-86-0

Formal Name: 3-(decylthio)-N-(2-methyl-1,3-bis((2R,3R,4S,5S,6R)-3,4,5-trihydroxy-6-(hydroxymethyl)tetrahydro-2H-pyran-2-yl)oxy)propan-2-yl)propanamide

MF: C₂₉H₅₅NO₁₃S

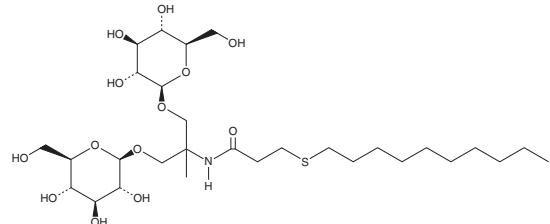
FW: 657.8

Purity: ≥95%

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

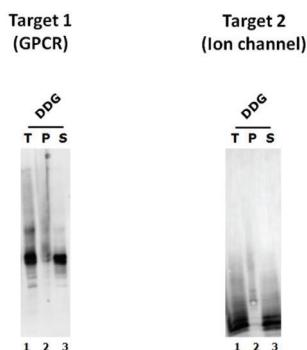
DDG is supplied as a powder. A stock solution may be made by dissolving the DDG in the solvent of choice, which should be purged with an inert gas. DDG is soluble (≥10 mg/ml) in ethanol and DMSO.

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. Organic solvent-free aqueous solutions of DDG can be prepared by directly dissolving the powder in aqueous buffers. DDG is soluble (≥10 mg/ml) in PBS (pH 7.2). We do not recommend storing the aqueous solution for more than one day.

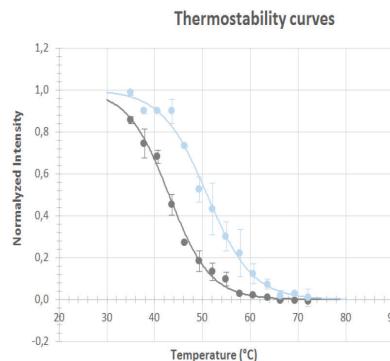
Description

DDG is a detergent that can be used to solubilize membrane proteins. It has a critical micelle concentration (CMC) of 0.54 mM.

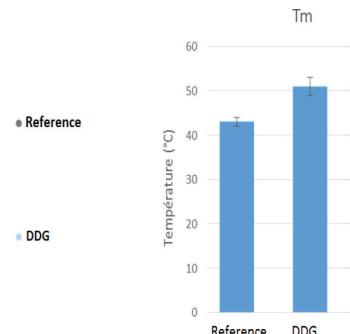
Images



Membrane proteins solubilization. The 2 targets were extracted from Sf9 membranes (GPCR) or mammalian membranes (ion channel) by using DDG reagent at 10-fold the critical micelle concentration (CMC). After solubilization, samples were centrifuged at 100,000 g. Proteins from pellets (P) and supernatants (S) were separated on a 4-15% Tris-glycine SDS-PAGE, transferred to PVDF membrane and immunodetected with a specific antibody. T = total, P = pellet, S = supernatant.



Stabilization of GPCR target. The GPCR protein was extracted using either reference detergent or DDG and heated at different temperatures for 30 min. After centrifugation at 20,000 g for 40 min, samples were separated on a 4-15% Tris-glycine SDS-PAGE, transferred to PVDF membrane and immunodetected with a specific antibody. Band intensity was measured and the resulting graph allowed Tm estimation.



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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 - USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM