

TECHNICAL DATA SHEET – DDG

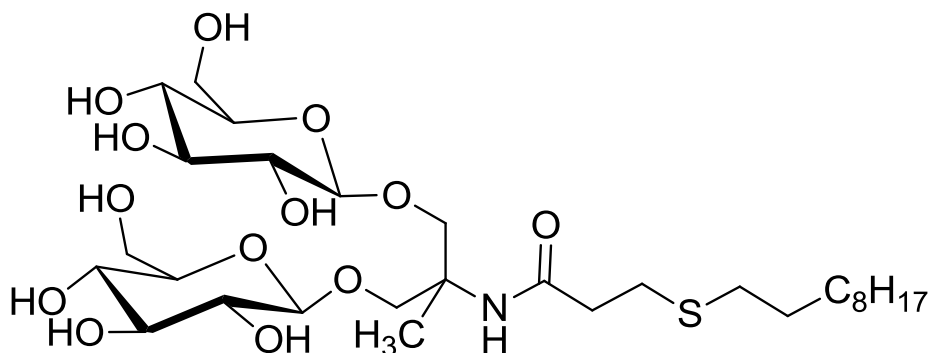
DDG

N-(2-methyl-1,3-bis(*O*-β-*D*-Glucose)propan-2-yl)-3-(decylthio)propanamide

2019

Information

Compound Name	<i>DDG</i>	Physical state	<i>White powder</i>
Catalogue Number <i>(check availability on CALIXAR's website)</i>	<i>DDG_100MG,</i> <i>DDG_250MG,</i> <i>DDG_500MG,</i> <i>DDG_1G</i>	Purity (HPLC, 214nm)	≤95%
Molec. Formula	<i>C₂₉H₅₅NO₁₃S</i>	Retention time (RP₁₈ HPLC)^b	<i>t_R = 14.6 min</i>
CAS	<i>nd</i>	CMC	<i>0.54 mM</i>
MW	<i>657.8 g/mol</i>	Exact Mass	<i>657.3394</i>
pKa	<i>na</i>		
Percent composition	<i>C, 52.95; H, 8.43; N, 2.13; O, 31.62; S, 4.87</i>		
Stability	<i>Store in <-20°C freezer for up to one year</i>		
Solubility	<i>Soluble in water (27mM), methanol and DMSO.</i>		
Structure			



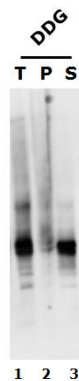
References

- 1- *Abla M et al. J Colloid Interface Sci 445: 127 (2015)*
- 2- *Abla M et al. J Org Chem 73: 8142 (2008).*
- 3- *Breyton C et al. J Biol Chem 288: 30763 (2013)*
- 4- *Abla M et al. J Fluorine Chem 134: 63 (2012).*
- 5- *Guillet P. et al J Langmuir (2019)*

TECHNICAL DATA SHEET – DDG

Biochemical Validation Data

**Target 1
(GPCR)**



**Target 2
(Ion channel)**

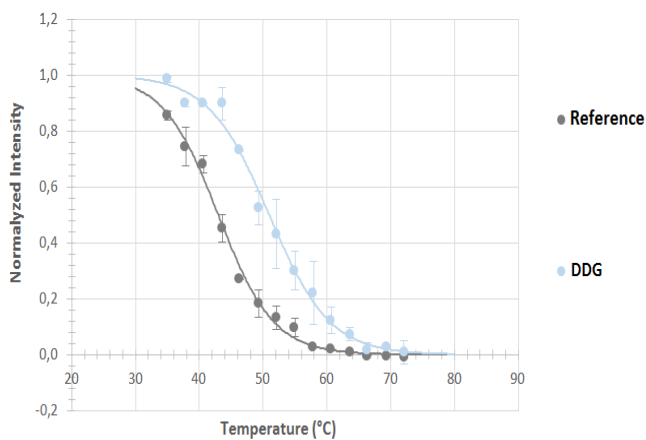


Membrane proteins solubilization.

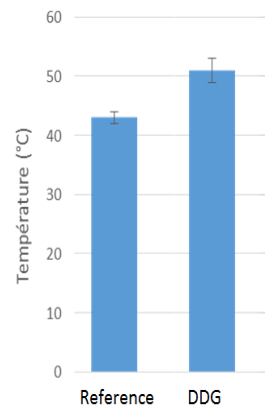
The 2 targets were extracted from Sf9 membranes (GPCR) or mammalian membranes (ion channel) by using DDG reagent at 10-fold the critical micelle concentration (cmc). After solubilization, samples were centrifuged at 100000g. Proteins from pellets (P) and supernatants (S) were separated on a 4-15% Tris-glycine SDS-PAGE, transferred to PVDF membrane and immunodetected with a specific antibody.

T = total, P = pellet, S = supernatant.

Thermostability curves



T_m



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 20000g 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 T_m estimation.

Restricted use: Limited Use Label License

The purchase of this product conveys to the purchaser the limited, non-transferable right to use the purchased amount of the product and progeny, to perform internal research and development for the sole benefit of the purchaser.

Safety: Not known as a hazardous substance or mixture. General industrial hygiene practices must be followed as the use of adapted personal protective equipment for skin and body.

Technical support

For additional product and technical information email our Technical Support team at contact@calixar.com.

Limited product warranty

TO THE EXTENT ALLOWED BY LAW, CALIXAR WILL NOT BE LIABLE FOR SPECIAL, INCIDENTAL, INDIRECT, PUNITIVE, MULTIPLE OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH OR ARISING FROM THIS DOCUMENT, INCLUDING YOUR USE OF IT.

© 2017 Calixar. All rights reserved. All trademarks are the property of Calixar and its subsidiaries.