

PRODUCT INFORMATION



CALXGLUK

Item No. 24784

CAS Registry No.: 1820596-85-7

Formal Name: (2R,2'R,2''R,3S,3'S,3'''S,4S,4'S,4''S,5R,5'R,5'''R,6R,6'R,6''R)-6,6',6'''-((((7²-(heptyloxy)-1²,3²,5²-trimethoxy-1,3,5,7(1,3)-tetrabenzenacyclooctaphane-1⁵,3⁵,5⁵-triy))tris(ethane-2,1-diyl))tris(1H-1,2,3-triazole-1,4-diyl))tris(methylene))tris(oxy))tris(2-(hydroxymethyl)tetrahydro-2H-pyran-3,4,5-triol)

MF: C₇₁H₉₅N₉O₂₂

FW: 1,426.6

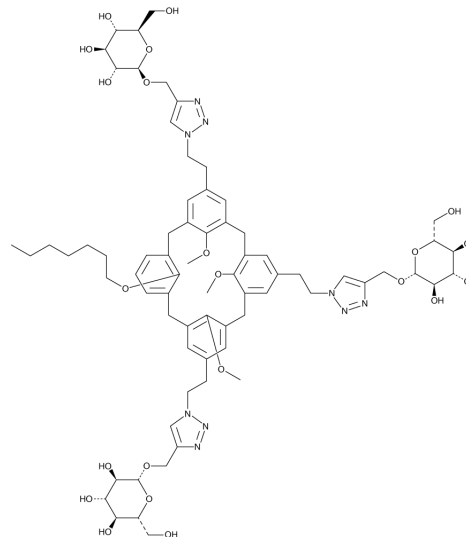
Purity: ≥95%

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.



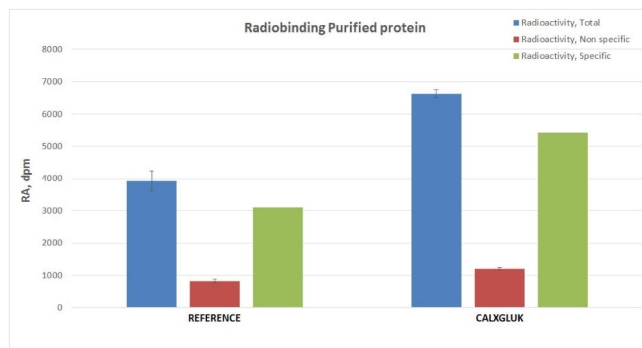
Laboratory Procedures

CALXGLUK is supplied as a crystalline solid. A stock solution may be made by dissolving the CALXGLUK in the solvent of choice, which should be purged with an inert gas. CALXGLUK is soluble in organic solvents such as methanol and DMSO. CALXGLUK is also soluble in water at a concentration of approximately 2.5 mM. We do not recommend storing the aqueous solution for more than one day.

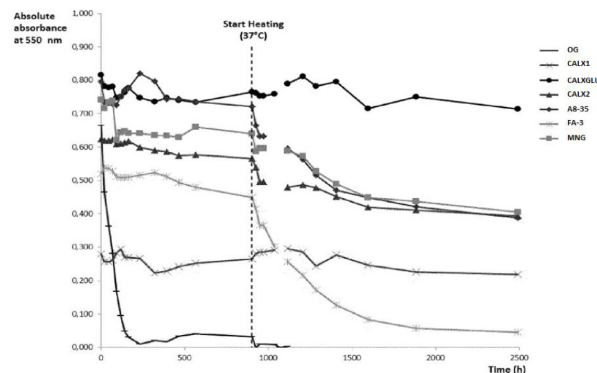
Description

CALXGLUK is a calixarene detergent that can be used to solubilize membrane proteins.¹ It has a critical micelle concentration (CMC) of 0.025 mM. CALXGLUK has been used to solubilize a membrane GPCR (MP-A) and a membrane transporter (MP-B) from yeast alone and in combination with Triton X-100 (Item No. 600217) and digitonin (Item No. 14952).

Images



Binding of radioligand on target protein, purified in reference detergent with or without CALXGLUK as an additive. Purified protein was incubated with radioligand in absence (total, blue bars) or presence (Non Specific signal, red bars) of an excess of cold ligand. After filtration on GF/C membranes and washing, scintillation agent was added and radioactivity was detected using a Microbeta2. Specific radioactivity (green bars) corresponds to (total signal) – (non-specific signal).



Stabilization of the Bacteriorhodopsin
After solubilization and purification in OG, reagents were added as stabilizers. Bacteriorhodopsin's activity was monitored over time at first 25°C and then 37°C by measuring absorbance at 560nm.

Reference

1. Desuzinges Mandon, E., Agez, M., Pellegrin, R., et al. *Anal. Biochem.* **517**, 40-49 (2017).

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

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