

PRODUCT INFORMATION



8-DY547-cGMP

Item No. 10010109

Formal Name: 1-ethyl-2-((4E)-4-(1-ethyl-3-(4-(2-(methylthio)ethylamino)-4-oxobutyl)-5-sulfonatoindolin-2-ylidene)but-2-en-2-yl)-3,3-dimethyl-3H-indolium-5-sulfonate-guanosine-3',5'-cyclic monophosphate, disodium salt

MF: C₄₂H₅₅N₈O₁₄PS₃ • 2Na

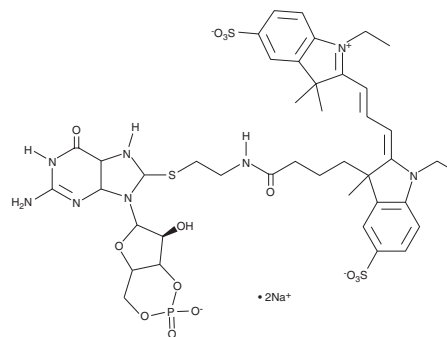
FW: 1,069.1

Purity: ≥98%

Supplied as: A solution in ethanol

Storage: -20°C

Stability: ≥1 year



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

Laboratory Procedures

8-DY547-cGMP is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as DMSO and dimethyl formamide purged with an inert gas can be used. The solubility of 8-DY547-cGMP in these solvents is approximately 10 mg/ml.

If aqueous stock solutions are required for biological experiments, they can best be prepared by diluting the organic solvent into aqueous buffers or isotonic saline. Ensure that 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

Through activation by the binding of cyclic nucleotides, cyclic nucleotide-gated (CNG) ion channels mediate sensory signal transduction in photoreceptors and olfactory cells. 8-DY547-cGMP is a fluorescently-labeled cyclic nucleotide that can be used to study CNGA2 channel activation. 8-DY547-cGMP and cGMP open the channel with equal efficiency and control of the channel activity is rapid and reversible. The difference in fluorescence (DF) can be determined by using DY647.¹

Reference

1. Biskup, C., Kusch, J., Schulz, E., *et al.* Relating ligand binding to activation gating in CNGA2 channels. *Nature Letters* **446**, 440-443 (2007).

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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