

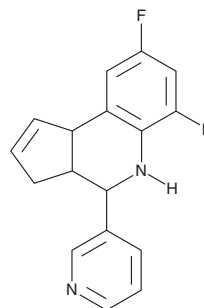
PRODUCT INFORMATION



Golgicide A

Item No. 18430

CAS Registry No.: 1005036-73-6
Formal Name: 6,8-difluoro-3a,4,5,9b-tetrahydro-4-(3-pyridinyl)-3H-cyclopenta[c]quinoline
Synonym: GCA
MF: C₁₇H₁₄F₂N₂
FW: 284.3
Purity: ≥98%
UV/Vis.: λ_{max}: 241, 294 nm
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

Golgicide A is supplied as a crystalline solid. A stock solution may be made by dissolving the golgicide A in the solvent of choice, which should be purged with an inert gas. Golgicide A is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of golgicide A in these solvents is approximately 1, 10, and 30 mg/ml, respectively.

Golgicide A is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, golgicide A should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Golgicide A has a solubility of approximately 0.1 mg/ml in a 1:8 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

ADP-ribosylation factor 1 (Arf1), when activated by guanine nucleotide exchange factors (ArfGEFs), plays a key role in regulating secretory traffic and membrane transport within the Golgi of eukaryotic cells. Golgicide A is a reversible inhibitor of the brefeldin A (Item No. 11861)-resistant, *cis*-Golgi ArfGEF, GBF1 (IC₅₀ = 3.3 μM).¹ Inhibition of GBF1 via golgicide A can result in rapid dissociation of COPI vesicle coat protein from Golgi membranes and disassembly of the Golgi and *trans*-Golgi network.¹ Golgicide A does not affect the association of the adaptor protein, AP-1, or the Arf1-binding protein, GCA3, with the *trans*-Golgi network nor does it interfere with the activity of the ArfGEFs, BIG1 or 2.¹ Golgicide A can arrest the secretion of soluble and membrane-associated proteins at the ER-Golgi intermediate compartment, as well as prevent endocytic transport of Shiga toxin to the *trans*-Golgi network.¹

Reference

1. Saenz, J.B., Sun, W.J., Chang, J.W., *et al.* Golgicide A reveals essential roles for GBF1 in Golgi assembly and function. *Nat. Chem. Biol.* 5(3), 157-165 (2009).

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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