

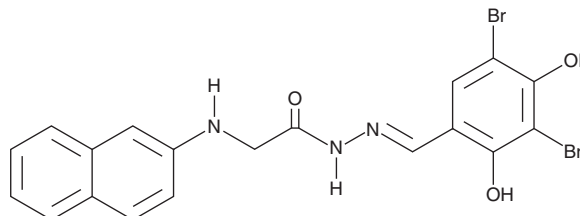
PRODUCT INFORMATION



CFTR Inhibitor II

Item No. 15772

CAS Registry No.: 328541-79-3
Formal Name: 2-[(3,5-dibromo-2,4-dihydroxyphenyl)methylene]hydrazide N-2-naphthalenyl-glycine
Synonyms: GlyH-101, Cystic Fibrosis Transmembrane Conductance Regulator Inhibitor II
MF: C₁₉H₁₅Br₂N₃O₃
FW: 493.2
Purity: ≥95%
UV/Vis.: λ_{max}: 243, 289, 329 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

CFTR inhibitor II is supplied as a crystalline solid. A stock solution may be made by dissolving the CFTR inhibitor II in the solvent of choice, which should be purged with an inert gas. CFTR inhibitor II is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of CFTR inhibitor II in these solvents is approximately 25 and 30 mg/ml, respectively.

CFTR inhibitor II is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CFTR inhibitor II should first be dissolved in DMF and then diluted with the aqueous buffer of choice. CFTR inhibitor II has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

The cystic fibrosis (CF) gene encodes a cAMP-regulated chloride channel, the CF transmembrane conductance regulator (CFTR).¹ CFTR inhibitor II, also known as GlyH-101, is a glycine hydrazide that selectively and reversibly blocks the CFTR channel ($K_i = 4.3 \mu\text{M}$).^{2,3} This compound binds to a site at the external pore of CFTR, occluding the pore and rapidly preventing chloride transport.^{2,3} Intraluminal CFTR inhibitor II greatly reduces intestinal fluid secretion induced by cholera toxin.³ It is effective in cells in culture and also in nasal and intestinal epithelia *in vivo*.⁴⁻⁷

References

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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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