

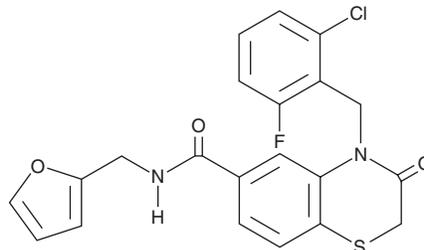
# PRODUCT INFORMATION



## G10

Item No. 22353

**CAS Registry No.:** 702662-50-8  
**Formal Name:** 4-[(2-chloro-6-fluorophenyl)methyl]-N-(2-furanylmethyl)-3,4-dihydro-3-oxo-2H-1,4-benzothiazine-6-carboxamide  
**Synonym:** STING Agonist-1  
**MF:** C<sub>21</sub>H<sub>16</sub>ClFN<sub>2</sub>O<sub>3</sub>S  
**FW:** 430.9  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 253, 292 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

G10 is supplied as a crystalline solid. A stock solution may be made by dissolving the G10 in the solvent of choice. G10 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of G10 in ethanol is approximately 0.5 mg/ml and approximately 30 mg/ml in DMSO and DMF.

G10 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, G10 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. G10 has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

G10 is an indirect activator of stimulator of interferon genes (STING) signaling.<sup>1</sup> It induces transcription of genes dependent on IRF3 and IFN, which are activated by STING, but has no effect on non-STING activated NF-κB-dependent transcription of IL-8, IL-1β, or MIP-1α in human fibroblasts. However, G10 does increase expression of NF-κB-dependent genes in human peripheral blood mononuclear cells (PBMCs) and human umbilical microvascular endothelial cells (HUMECs). *In vitro*, it prevents replication of the chikungunya and Venezuelan equine encephalitis alphaviruses (IC<sub>50</sub>s = 8.01 and 24.57 μM, respectively). G10 (100 μM) increases phosphorylation of IRF3, which is lost in cells lacking STING.

### Reference

1. Sali, T.M., Pryke, K.M., Abraham, J., *et al.* Characterization of a novel human-specific STING agonist that elicits antiviral activity against emerging alphaviruses. *PLoS Pathog.* **11(12)**, e1005324 (2015).

#### 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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