

# PRODUCT INFORMATION



## GLX-351322

Item No. 31523

**CAS Registry No.:** 835598-94-2  
**Formal Name:** 2-[[2-[4-(2-furanylcarbonyl)-1-piperazinyl]acetyl]amino]-5,6-dihydro-4H-cyclopenta[b]thiophene-3-carboxylic acid, ethyl ester

**MF:** C<sub>21</sub>H<sub>25</sub>N<sub>3</sub>O<sub>5</sub>S  
**FW:** 431.5

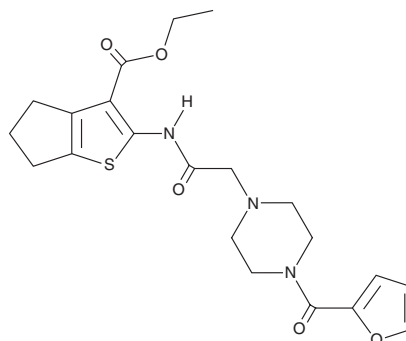
**Purity:** ≥98%

**UV/Vis.:** λ<sub>max</sub>: 229, 253, 324 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

GLX-351322 is supplied as a crystalline solid. A stock solution may be made by dissolving the GLX-351322 in the solvent of choice, which should be purged with an inert gas. GLX-351322 is soluble in the organic solvent dimethyl formamide (DMF). GLX-351322 is soluble in DMF at a concentration of approximately 1 mg/ml. GLX-351322 is also slightly soluble in DMSO.

GLX-351322 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, GLX-351322 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. GLX-351322 has a solubility of approximately 0.33 mg/ml in a 1:2 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

GLX-351322 is an inhibitor of NADPH oxidase 4 (NOX4; IC<sub>50</sub> = 5 μM).<sup>1</sup> It is selective for NOX4 over NOX2 (IC<sub>50</sub> = 40 μM). GLX-351322 (10 μM) reduces glucose-induced production of reactive oxygen species (ROS) and cytotoxicity in isolated human pancreatic islets. It decreases blood glucose levels in an intravenous glucose tolerance test in mice fed a high-fat diet when administered in the drinking water at an estimated dose of 3.8 mg/kg per day.

### Reference

1. Anvari, E., Wikström, P., Walum, E., *et al.* The novel NADPH oxidase 4 inhibitor GLX351322 counteracts glucose intolerance in high-fat diet-treated C57BL/6 mice. *Free Radic. Res.* **49(11)**, 1308-1318 (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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