

# PRODUCT INFORMATION

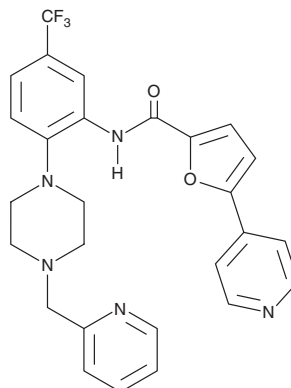


## SPHINX31

Item No. 21582

**CAS Registry No.:** 1818389-84-2  
**Formal Name:** 5-(4-pyridinyl)-N-[2-[4-(2-pyridinylmethyl)-1-piperazinyl]-5-(trifluoromethyl)phenyl]-2-furancarboxamide

**MF:** C<sub>27</sub>H<sub>24</sub>F<sub>3</sub>N<sub>5</sub>O<sub>2</sub>  
**FW:** 507.5  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 269, 317 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

SPHINX31 is supplied as a crystalline solid. A stock solution may be made by dissolving the SPHINX31 in the solvent of choice. SPHINX31 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of SPHINX31 is approximately 10 mg/ml in ethanol and DMSO and approximately 33 mg/ml in DMF.

SPHINX31 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, SPHINX31 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. SPHINX31 has a solubility of approximately 0.03 mg/ml in a 1:30 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

SPHINX31 is a potent inhibitor of serine/arginine-rich protein kinase 1 (SRPK1; IC<sub>50</sub> = 5.9 nM).<sup>1</sup> It is selective for SRPK1 over a panel of 50 kinases at a concentration of 1 μM. SPHINX31 inhibits phosphorylation of serine/arginine-rich splicing factor 1 (SRSF1), an SRPK1 substrate, in PC3 cells (EC<sub>50</sub> = 360 nM) and increases expression of the anti-angiogenic VEGF-A165b splice variant in retinal pigment epithelial (RPE) cells. *In vivo*, SPHINX31 (2 μg per eye) inhibits blood vessel growth and macrophage infiltration in the eyes of a mouse model of choroidal neovascularization.

### Reference

1. Batson, J., Toop, H.D., Redondo, C., *et al.* Development of potent, selective SRPK1 inhibitors as potential topical therapeutics for neovascular eye disease. *ACS Chem. Biol.* (2017).

#### 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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