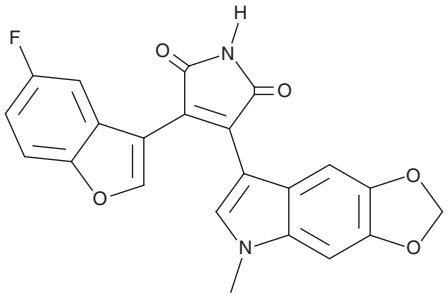
PRODUCT INFORMATION

9-ING-41

Item No. 36629

CAS Registry No.:	1034895-42-5
Formal Name:	3-(5-fluoro-3-benzofuranyl)-4-(5-methyl-5H-1,3-dioxolo[4,5-f]indol-7-yl)-1H-pyrrole-2,5-dione
Synonym:	Elraglusib
MF:	$C_{22}H_{13}FN_2O_5$
FW:	404.4
Purity:	≥98%
Supplied as:	A 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

9-ING-41 is supplied as a solid. A stock solution may be made by dissolving the 9-ING-41 in the solvent of choice, which should be purged with an inert gas. 9-ING-41 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of 9-ING-41 in these solvents is approximately 1 and 2 mg/ml, respectively.

Description

9-ING-41 is an inhibitor of glycogen synthase kinase 3β (GSK3β; IC_{50} = 0.71 µM).[1] It inhibits the growth of MiaPaCa-2, BxPC-3, and HuP-T3 pancreatic cancer cells (IC_{50}s = 5, 1, and 0.6 µM, respectively). 9-ING-41 (5 µM) inhibits GSK3β phosphorylation and induces apoptosis in BxPC-3 and HuP-T3 cells. *In vivo*, 9-ING-41 (40 mg/kg) reduces tumor growth in an SKOV3 mouse xenograft model.[2] It also reduces pleural thickening and improves lung function in a mouse model of *S. pneumoniae*-induced empyema.[3]

References

1. Gaisina, I.N., Gallier, F., Ougolkov, A.V., *et al.* From a natural product lead to the identification of potent and selective benzofuran-3-yl-(indol-3-yl)maleimides as glycogen synthase kinase 3*β* inhibitors that suppress proliferation and survival of pancreatic cancer cells. *J. Med. Chem.* **52(7)**, 1853-1863 (2009).
2. Hilliard, T.S., Gaisina, I.N., Muehlbauer, A.G., *et al.* Glycogen synthase kinase 3 beta inhibitors induce apoptosis in ovarian cancer cells and inhibit *in vivo* tumor growth. *Anticancer Drugs* **22(10)**, 978-985 (2011).
3. Boren, J., Shryock, G., Fergis, A., *et al.* Inhibition of glycogen synthase kinase 3β blocks mesomesenchymal transition and attenuates *Streptococcus pneumonia*-mediated pleural injury in mice. *Am. J. Pathol.* **187(11)**, 2461-2472 (2017).

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