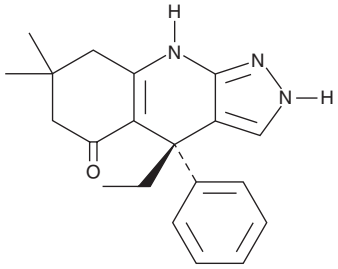
PRODUCT INFORMATION

BRD0705

Item No. 37314

CAS Registry No.:	2056261-41-5
Formal Name:	(4S)-4-ethyl-1,2,4,6,7,8-hexahydro-7,7-dimethyl-4-phenyl-5H-pyrazolo[3,4-b]quinolin-5-one
MF:	$C_{20}H_{23}N_3O$
FW:	321.4
Purity:	≥98%
UV/Vis.:	λ_{max}: 331 nm
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

BRD0705 is supplied as a solid. A stock solution may be made by dissolving the BRD0705 in the solvent of choice, which should be purged with an inert gas. BRD0705 is soluble in methanol and DMSO.

Description

BRD0705 is an inhibitor of glycogen synthase kinase 3α (GSK3α; IC_{50} = 66 nM).[1] It is selective for GSK3α over GSK3β (IC_{50} = 515 nM). BRD0705 (10 and 20 µM) inhibits GSK3α autophosphorylation in U937 cells. It impairs colony formation of MOLM-13, TF-1, U937, MV4-11, HL-60, and NB4 acute myeloid leukemia (AML) cells. *In vivo*, BRD0705 (30 mg/kg) inhibits leukemia development in secondary recipient mice in an *MLL-AF9* mouse syngeneic tumor model.

Reference

1. Wagner, F.F., Benajiba, L., Campbell, A.J., *et al.* Exploiting an Asp-Glu "switch" in glycogen synthase kinase 3 to design paralog-selective inhibitors for use in acute myeloid leukemia. *Sci. Transl. Med.* **10(431)**, eaam8460 (2018).

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