# 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.:  $\lambda_{\text{max}}$ : 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  $3\alpha$  (GSK3 $\alpha$ ; IC $_{50}$  = 66 nM).<sup>1</sup> It is selective for GSK3 $\alpha$  over GSK3 $\beta$  (IC<sub>50</sub> = 515 nM). BRD0705 (10 and 20  $\mu$ M) inhibits GSK3 $\alpha$  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).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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.

# WARRANTY AND LIMITATION OF REMEDY

subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information Buyer agrees to purchase the material can be found on our website.

Copyright Cayman Chemical Company, 09/03/2023

### **CAYMAN CHEMICAL**

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.**CAYMANCHEM**.COM