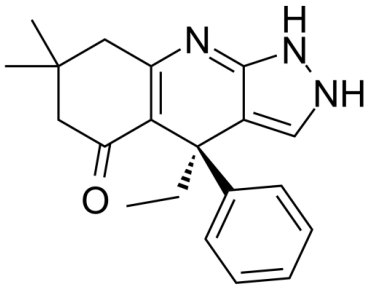
Data Sheet

Product Name:	BRD5648
Cat. No.:	CS-0114013
CAS No.:	2056261-42-6
Molecular Formula:	$C_{20}H_{23}N_3O$
Molecular Weight:	321.42
Target:	GSK-3
Pathway:	PI3K/Akt/mTOR; Stem Cell/Wnt
Solubility:	DMSO : 300 mg/mL (933.36 mM; Need ultrasonic)



BIOLOGICAL ACTIVITY:

BRD5648 ((R)-BRD0705) is a negative control of BRD0705. BRD0705 is a potent, paralog selective and orally active GSK3α inhibitor with an IC_{50} of 66 nM and a K_d of 4.8 μM. BRD0705 displays increased selectivity for GSK3α (8-fold) versus GSK3β (IC_{50} of 515 nM). BRD0705 can be used for acute myeloid leukemia (AML)[1][2]. **In Vitro:** BRD5648, the inactive enantiomer of BRD0705, does not induce changes in enzyme phosphorylation or total β-catenin protein stabilization[1].

References:

[1]. Wagner FF, 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. 2018 Mar 7;10(431). pii: eaam8460.

[2]. Wagner FF, 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. 2018 Mar 7;10(431). pii: eaam8460.

CAIndexNames:

5H-Pyrazolo[3,4-b]quinolin-5-one, 4-ethyl-1,2,4,6,7,8-hexahydro-7,7-dimethyl-4-phenyl-, (4R)-

SMILES:

O=C1C2=C(N=C3C([C@@]2(CC)C4=CC=CC=C4)=CNN3)CC(C)(C)C1

Tel: 732-484-9848 Fax: 888-484-5008 E-mail: sales@ChemScene.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA