

# PRODUCT INFORMATION

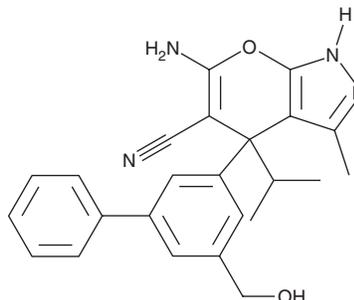


## SHIN 1

Item No. 35715

**CAS Registry No.:** 2146095-85-2  
**Formal Name:** 6-amino-1,4-dihydro-4-[5-(hydroxymethyl)[1,1'-biphenyl]-3-yl]-3-methyl-4-(1-methylethyl)-pyrano[2,3-c]pyrazole-5-carbonitrile

**Synonym:** RZ2994  
**MF:** C<sub>24</sub>H<sub>24</sub>N<sub>4</sub>O<sub>2</sub>  
**FW:** 400.5  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 256 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

SHIN 1 is supplied as a solid. A stock solution may be made by dissolving the SHIN 1 in the solvent of choice, which should be purged with an inert gas. SHIN 1 is soluble in the organic solvent DMSO.

### Description

SHIN 1 is an inhibitor of serine hydroxymethyltransferase 1 (SHMT1) and SHMT2 (IC<sub>50</sub>s = 5 and 13 nM, respectively).<sup>1</sup> It inhibits proliferation of H1299 non-small cell lung cancer (NSCLC) cells overexpressing the proto-oncogene FRAT1 (IC<sub>50</sub> = 0.6 μM). SHIN 1 decreases tumor volume in an NSCLC mouse xenograft model using FRAT1-overexpressing H1299 cells when administered at a dose of 100 mg/kg three times a week.

### Reference

1. He, L., Endress, J., Cho, S., *et al.* Suppression of nuclear GSK3 signaling promotes serine/one-carbon metabolism and confers metabolic vulnerability in lung cancer cells. *Sci. Adv.* **8(20)**, eabm8786 (2022).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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