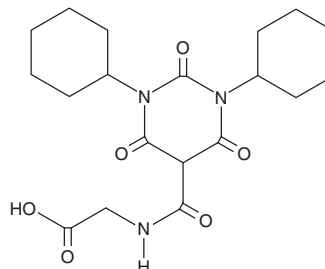


PRODUCT INFORMATION



Daprodustat Item No. 19915

CAS Registry No.: 960539-70-2
Formal Name: N-[(1,3-dicyclohexylhexahydro-2,4,6-trioxo-5-pyrimidinyl)carbonyl]-glycine
Synonym: GSK1278863
MF: C₁₉H₂₇N₃O₆
FW: 393.4
Purity: ≥98%
UV/Vis.: λ_{max}: 210, 265 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Daprodustat is supplied as a crystalline solid. A stock solution may be made by dissolving the daprodustat in the solvent of choice, which should be purged with an inert gas. Daprodustat is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of daprodustat in ethanol is approximately 1 mg/ml and 3 mg/ml in DMSO and DMF.

Daprodustat is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, daprodustat should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Daprodustat has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Daprodustat is an inhibitor of hypoxia-inducible factor prolyl hydroxylase 1 (HIF-PH1), HIF-PH2, and HIF-PH3 (IC₅₀s = 3.5, 22.2, 5.5 nM, respectively).¹ It is selective for HIF-PH1, -2, and -3 over factor-inhibiting HIF (FIH) and collagen prolyl hydroxylase (CP4H; IC₅₀s = 9,800 and >200,000 nM, respectively). Daprodustat (25 and 50 μM) induces accumulation of HIF-1α and HIF-2α in Hep3B cells. *In vivo*, daprodustat (60 mg/kg) increases plasma levels of erythropoietin (EPO) in mice. It increases the number of reticulocytes and levels of hemoglobin in mice when administered at doses of 3, 10, and 30 mg/kg.

Reference

1. Aziazi, J.L., Duffy, K.J., Adms, D.F., *et al.* Discovery and preclinical characterization of GSK1278863 (daprodustat), a small molecule hypoxia inducible factor-prolyl hydroxylase inhibitor for anemia. *J. Pharmacol. Exp. Ther.* **363**(347), 336-347 (2017).

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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