

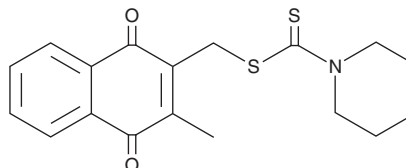
PRODUCT INFORMATION



PKM2 Inhibitor

Item No. 36815

CAS Registry No.: 94164-88-2
Formal Name: 1-piperidinecarbodithioic acid, (1,4-dihydro-3-methyl-1,4-dioxo-2-naphthalenyl)methyl ester
Synonyms: Compound 3K, MDK4882, PKM2-IN-1, Pyruvate Kinase M2 Inhibitor
MF: C₁₈H₁₉NO₂S₂
FW: 345.5
Purity: ≥98%
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

PKM2 inhibitor is supplied as a solid. A stock solution may be made by dissolving the PKM2 inhibitor in the solvent of choice, which should be purged with an inert gas. PKM2 inhibitor is soluble in the organic solvent dimethyl formamide at a concentration of approximately 1 mg/ml.

Description

PKM2 inhibitor is an inhibitor of pyruvate kinase M2 (PKM2; IC₅₀ = 2.95 μM), a tumor-specific kinase with a role in glycolysis.¹ It is selective for PKM2 over PKM1 and L-type pyruvate kinase (PKLR; IC₅₀s = 16.71 and 8.2 μM, respectively). PKM2 inhibitor is cytotoxic to HCT116, HeLa, and H1299 cells (IC₅₀s = 0.18, 0.29, and 1.56 μM, respectively). It induces apoptosis and autophagy in SKOV3 ovarian cancer cells when used at concentrations of 1, 2.5, and 5 μM.² *In vivo*, PKM2 inhibitor (5 mg/kg) reduces tumor volume and weight in an SKOV3 mouse xenograft model.

References

1. Ning, X., Qi, H., Li, R., *et al.* Discovery of novel naphthoquinone derivatives as inhibitors of the tumor cell specific M2 isoform of pyruvate kinase. *Eur. J. Med. Chem.* **138**, 343-352 (2017).
2. Park, J.H., Kundu, A., Lee, S.H., *et al.* Specific pyruvate kinase M2 inhibitor, compound 3K, induces autophagic cell death through disruption of the glycolysis pathway in ovarian cancer cells. *Int. J. Biol. Sci.* **17**(8), 1895-1908 (2021).

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.

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