PRODUCT INFORMATION



3-Mercaptopicolinic Acid (hydrochloride)

Item No. 20895

CAS Registry No.: 320386-54-7

Formal Name: 3-mercapto-2-pyridinecarboxylic

acid, monohydrochloride

Synonym: SKF 34288

MF: C4H5NO2S • HCI

FW: 191.6 ≥95% **Purity:**

 λ_{max} : 209, 251, 316, 431 nm UV/Vis.:

Supplied as: A crystalline 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

3-Mercaptopicolinic acid (hydrochloride) is supplied as a crystalline solid. Aqueous solutions of 3-mercaptopicolinic acid (hydrochloride) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of 3-mercaptopicolinic acid (hydrochloride) in PBS (pH 7.2) is approximately 0.2 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

3-Mercaptopicolinic acid is an inhibitor of gluconeogenesis. In perfused rat livers, gluconeogenesis was inhibited when lactate, pyruvate, or alanine served as substrate, but not with fructose, suggesting phosphoenolpyruvate carboxykinase as the site of inhibition. 1-3

References

- 1. DiTullio, N.W., Berkoff, C.E., Blank, B., et al. 3-Mercaptopicolinic acid, an inhibitor of gluconeogenesis. Biochem. J. 138(3), 387-394 (1974).
- 2. Robinson, B.H. and Oei, J. 3-Mercaptopicolinic acid, a preferential inhibitor of the cytosolic phosphoenolpyruvate carboxykinase. FEBS Lett. 58(1), 12-15 (1975).
- Hidalgo, J., Latorre, P., Carrodeguas, J.A., et al. Inhibition of pig phosphoenolpyruvate carboxykinase isoenzymes by 3-mercaptopicolinic acid and novel inhibitors. PLoS One 11(7), e0159002 (2016).

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.

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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