

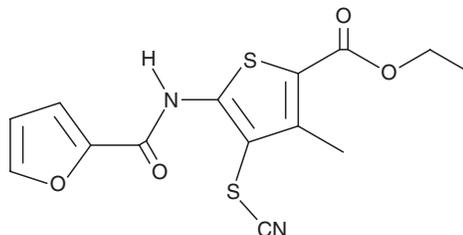
PRODUCT INFORMATION



CBR-5884

Item No. 19236

CAS Registry No.: 681159-27-3
Formal Name: 5-[(2-furanylcarbonyl)amino]-3-methyl-4-thiocyanato-2-thiophenecarboxylic acid, ethyl ester
MF: C₁₄H₁₂N₂O₄S₂
FW: 336.4
Purity: ≥98%
UV/Vis.: λ_{max}: 248, 318 nm
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

CBR-5884 is supplied as a crystalline solid. A stock solution may be made by dissolving the CBR-5884 in the solvent of choice, which should be purged with an inert gas. CBR-5884 is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of CBR-5884 in these solvents is approximately 14 and 16 mg/ml, respectively.

CBR-5884 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CBR-5884 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. CBR-5884 has a solubility of approximately 0.12 mg/ml in a 1:7 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

CBR-5884 is an inhibitor of 3-phosphoglycerate dehydrogenase, inhibiting serine synthesis from 3-phosphoglycerate in cells with an IC₅₀ value of 33 μM.¹ It does not affect other NAD⁺-dependent dehydrogenases, including lactate dehydrogenase and malate dehydrogenase 1. CBR-5884 inhibits the proliferation of cancer cells by blocking *de novo* serine synthesis and is selectively cytotoxic for cells with high serine biosynthetic activity.¹

Reference

1. Mullarky, E., Lucki, N.C., Zavareh, R.B., *et al.* Identification of a small molecule inhibitor of 3-phosphoglycerate dehydrogenase to target serine biosynthesis in cancers. *Proc. Natl. Acad. Sci. USA* **113**(7), 1778-1783 (2016).

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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