

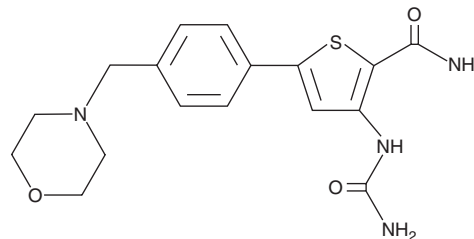
PRODUCT INFORMATION



CAY10657

Item No. 11140

CAS Registry No.: 494772-86-0
Formal Name: 3-[(aminocarbonyl)amino]-5-[4-(4-morpholinylmethyl)phenyl]-2-thiophenecarboxamide
MF: C₁₇H₂₀N₄O₃S
FW: 360.4
Purity: ≥98%
UV/Vis.: λ_{max}: 202, 253, 313 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

CAY10657 is supplied as a crystalline solid. A stock solution may be made by dissolving the CAY10657 in the solvent of choice, which should be purged with an inert gas. CAY10657 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of CAY10657 in these solvents is approximately 10 mg/ml.

CAY10657 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CAY10657 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. CAY10657 has a solubility of approximately 0.1 mg/ml in a 1:8 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

The NF-κB/Rel family of transcription factors induce and coordinate the expression of pro-inflammatory genes including cytokines, chemokines, interferons, MHC proteins, growth factors, and cell adhesion molecules. Under resting conditions NF-κB dimers are retained in the cytoplasm by a member of the IκB family of inhibitory proteins. Upon activation by cytokines or other stimuli, IKK phosphorylates IκB, initiating a signaling cascade to activate gene transcription.¹⁻³ CAY10657 is a thiophenecarboximide derivative proposed to inhibit IKK2.⁴ Currently, there are no published reports of its biological activity. However, inhibition of NF-κB activation is likely to be of broad utility in the treatment of inflammatory diseases and cancer.^{5,6}

References

1. Delhase, M., Hayakawa, M., Chen, Y., *et al. Science* **284**(5412), 309-313 (1999).
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3. Mercurio, F., Zhu, H., Murray, B.W., *et al. Science* **278**(5339), 860-866 (1997).
4. Faull, A., Johnstone, C., Morley, A., *et al. AstraZeneca Ab WO03010158A1* (2003).
5. Baxter, A., Brough, S., Cooper, A., *et al. Bioorg. Med. Chem. Lett.* **14**(11), 2817-2822 (2004).
6. Kishore, N., Sommers, C., Mathialagan, S., *et al. J. Biol. Chem.* **278**(35), 32861-32871 (2003).

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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