

Catalog	Unit
TBI1588-5MG	5 mg
TBI1588-25MG	25 mg

Product Details

Formal Name: Ethyl 5-(furan-2-carboxamido)-3-methyl-4-thiocyanatothiophene-2-carboxylate

Molecular Formula: C₁₄H₁₂N₂O₄S₂

Formula Weight: 336.39

CAS Number: 681159-27-3

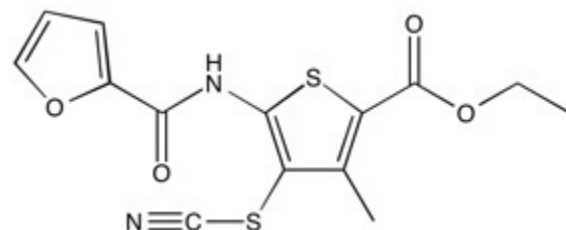
Purity: >98%

Formulation: powder

Solubility: Soluble in DMSO (up to 50 mg/ml), or in DMF (up to 50 mg/ml).

Storage: -20°C

Stability: ≥ 2 years.



Applications

Serine biosynthesis inhibitor (PHGDH inhibitor)

Functions

Potent and selective inhibitor of 3-phosphoglycerate dehydrogenase (PHGDH), IC₅₀=33 μM. The action of PHGDH is the first committed step of serine biosynthesis and certain cancer cells overexpress PHGDH. CBR-5884 inhibits serine biosynthesis in cells with no effect on two other dehydrogenases, lactate dehydrogenase and MDH1 and without general cytotoxic effects up to 40 μM. CBR-5884 is selectively toxic to tumor cells with high serine synthesis activity. A novel tool for selective inhibition of serine biosynthesis in cells which also provides further proof that PHGDH is a viable target for the development of novel anticancer agents.

Application Procedures

First dissolved in DMSO (up to 50 mg/ml), or in DMF (up to 50 mg/ml), then diluted to aqueous buffer. Solutions in DMSO or DMF may be stored at -20°C for up to 2 months.

For research use only.