

Catalog # 10-4717 BT2

CAS# 34576-94-8
3,6-Dichlorobenzo[b]thiophene-2-carboxylic acid
Lot # FBS1027

BT2 is an inhibitor of the mitochondrial branched-chain α -ketoacid dehydrogenase complex kinase (BCKDC) - IC₅₀ = 3.19 μ M.¹ Inhibition of this kinase has been shown to reduce levels of branched-chain amino acid concentrations *in vivo*. BT2 has also been shown to be a moderate inhibitor (Ki = 59 μ M) of myeloid cell leukemia 1(Mcl 1), a Bcl-2 family protein.²

- 1) Tso et al. (2014), Benzothiophene carboxylate derivatives as novel allosteric inhibitors of branched-chain α -ketoacid dehydrogenase kinase; J.Biol.Chem. **289** 20583
- 2) Friberg et al. (2013), Discovery of potent myeloid cell leukemia (Mcl 1) inhibitors using fragment based methods and structure based design; J.Med.Chem. **56** 15

PHYSICAL DATA

 $\begin{tabular}{lll} Molecular Weight: & 247.10 \\ Molecular Formula: & C_9H_4Cl_2O_2S \\ Purity: & >95\% \ by \ TLC \\ NMR: \ (Conforms) \\ \end{tabular}$

Solubility: DMSO (> 20mg/mL)

Physical Description: Off-white solid

Storage and Stability: Store as supplied at -20°C for up to 1 year from the date of purchase. Solutions in

DMSO may be stored at -20°C for up to 3 months.

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