

Catalog # 10-1567 Compound 115-7c

908074-72-6

4-(5-((Benzyloxycarbonyl)-4-(2,4-dichlorophenyl)-6-methyl-2-oxo-3,4-dihydropyrimidin-1(2H)-yl)butanoic acid; SW02 Lot # X106421

Acts as an artificial co-chaperone for HSP70.¹ The activity of compound 115-7c mirrors those of HSP40 stimulating the ATPase and protein-folding activities of prokaryotic HSP70. Increases tau levels in cell lines overexpressing tau.² Induces solubilization of polyglutamine and exacerbates polyQ-mediated toxicity.^{3,4} An important probe for understanding HSP70 functions.⁴

- 1) Wisen et al. (2010), Binding of a small molecule a the protein-protein interface regulates the chaperone activity of hsp70-hsp40; ACS Chem. Biol., **5** 611
- 2) Jinwal et al. (2010), Hsp70 ATPase Modulators as Therapeutics for Alzheimer's and other Neurodegenerative Diseases; Mol. Cell Pharmacol., **2** 43
- 3) Chafekar et al. (2012), Pharmacological tuning of heat shock protein 70 modulates polyglutamine toxicity and aggregation; ACS Chem. Biol., **7** 1556
- 4) Walter et al. (2011), Ordered assembly of heat shock proteins Hsp26, Hsp70, Hsp90, and Hsp104, on expanded polyglutamine fragments revealed by chemical probes; J. Biol. Chem., **286** 40486

PHYSICAL DATA

Molecular Weight: 477.34

NMR: (Conforms)

Solubility: DMSO (up to 20 mg/ml)

Physical Description: Off-white solid

Storage and Stability: Store as supplied, desiccated at -20°C for up to 2 years from the date of purchase. Solutions in

DMSO may be stored at -20°C for up to 2 months.

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