

Product Data Sheet

Product Name: FT827
Cat. No.: GC32917

Chemical Properties

Cas. No. 1959537-86-0

SMILES C=CS(=O)(NC1=CC=CC=C1C2=CC=C(C(N3CCC(O)(CN(C=NC4=C5C=NN4C)C5=O)CC3)=O)C=C2)=O

Formula $C_{27}H_{28}N_6O_5S$ M.Wt 548.61

Solubility DMSO : 125 mg/mL (227.85 mM) Storage Store at -20°C

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

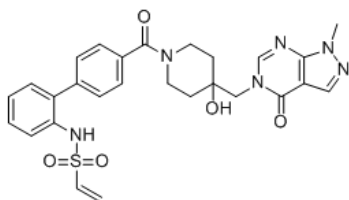
Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

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Structure



Protocol

Cell experiment [1]:

Cell lines MCF7 cells (human breast cancer cell line)

Intact MCF7 breast cancer cells were incubated with FT827, followed by Preparation Method incubation with the ubiquitin active site suicide probe haemagglutinin (HA)-tagged ubiquitin bromoethyl (HA-UbC2Br).

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Reaction
Conditions 0.1 μ M; 60min

Applications FT827 inhibited USP7 probe reactivity with IC₅₀ of 0.1-2 μ M. FT827 only affected USP7, but not other deubiquitinases (DUBs) including USP47 and USP10

References:

[1] Turnbull AP, Ioannidis S, Krajewski WW, et al. Molecular basis of USP7 inhibition by selective small-molecule inhibitors. Nature. 2017 Oct 26;550(7677):481-486.

Background

FT827 is a selective, covalent ubiquitin-specific protease 7 (USP7; K_i=4.2 μ M, K_d=7.8 μ M) inhibitor. FT827 can be used in cancer-related research^[1-2].

In vitro, FT827 (0.1-2 μ M) treated MCF7 breast cancer cells for 60 minutes. FT827 specifically inhibited USP7 activity in cells and did not affect other DUBs including USP47 and USP10^[2].

References:

[1] El-Hamaky AA, El-Hamamsy MH, El-Moselhy TF, et al. Therapeutic targeting of ubiquitin-specific protease 7 (USP7): Mechanistic insights, dysregulation, and advances in drug discovery. Eur J Med Chem. 2025 Oct 15;296:117872.

[2] Turnbull AP, Ioannidis S, Krajewski WW, et al. Molecular basis of USP7 inhibition by selective small-molecule inhibitors. Nature. 2017 Oct 26;550(7677):481-486.

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