

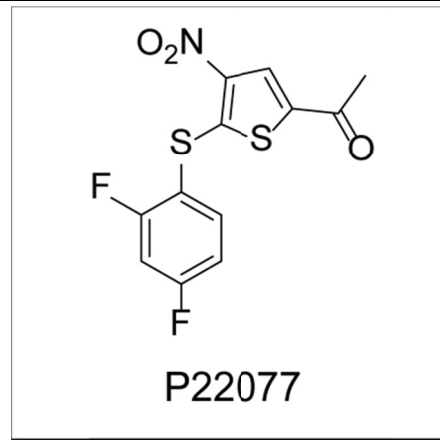


Product Specification Sheet

Product Name: P22077
Catalog Number: C7220-2 (powder)
Package Size: 2 mg

Technical information:

Chemical Formula: C₁₂H₇F₂NO₃S₂
CAS #: 1247819-59-5
Molecular Weight: 315.32
Purity: >98%
Formulation: White solid
Solubility: Soluble in DMSO up to 50 mM
Chemical Name: 1-(5-((2,4-difluorophenyl)thio)-4-nitrothiophen-2-yl)ethanone
Storage: Store solid powder at 4°C desiccated;
Store DMSO solution at -20°C.



Handling: • For C7220-2 (powder), add 254 µL of DMSO to make 25 mM solution.

Biological Activity: P22077 is a potent and selective USP7 inhibitor. It specifically inhibits deubiquitylating enzyme (DUB) USP7 and the closely related USP47 (at 5µM), but not the other majority of DUBs (at 15-45µM). USP7 has been found to be critical in cancer progression due to its influence on the stability of the tumor suppressor p53. The inhibition of USP7 is predicted to destabilize HDM2 and stabilize p53, and USP7 exerts both p53-dependent and p53-independent effects on controlling cell proliferation and apoptosis.

Reference: 1. Mikael Altun et al. Activity-Based Chemical Proteomics Accelerates Inhibitor Development for Deubiquitylating Enzymes. (2011) Chemistry & Biology 18, 1401–1412.

For Technical Support: technical@cellagentech.com

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