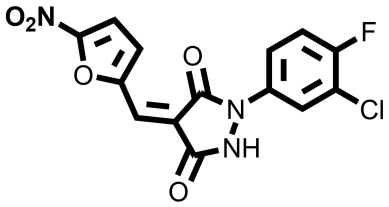
Xcess Biosciences Inc.
7144 N Harlem Ave #169
Chicago, IL 60631 USA

http://www.xcessbio.com
Toll free: 1-866-706-2330
Fax: 1-619- 810-0718
Email: info@xcessbio.com

Ubiquitin-activating Enzyme (E1) Inhibitor PYZD-4409

Chemical Name: 1-(3-Chloro-4-fluorophenyl)-4-[(5-nitro-2-furanyl)methylene]-3,5-pyrazolidinedione



Molecular Weight:	351.67
Formula:	$C_{14}H_7ClFN_3O_5$
Purity:	≥98%
CAS#:	423148-78-1
Solubility:	DMSO up to 100 mM
Storage	Powder: 4 °C 1 year DMSO: 4 °C 3 months -20 °C 1 year

Biological Activity:

PYZD-4409 is a novel potent, selective and cell permeable inhibitor of ubiquitin-activating enzyme (E1). It induces cell death in hematologic malignant cell lines and primary patient samples preferentially over normal hematopoietic cells. PYZD-4409 blocks degradation of the short-lived proteins p53 and cyclin D3. It inhibits NF-κB activation and induces cell death associated with ER stress. It also displays antitumor effects in a mouse model of leukemia by intraperitoneal administration of the drug.

How to Use:

In vitro: PYZD-4409 was used at 10-30 μM final concentration in various in vitro assays.

In vivo: PYZD-4409 was dosed intraperitoneally to the mouse model of leukemia (MDAY-D2 murine leukemia cells) at 10 mg/kg once per day.

Reference:

1. Xu GW, et al. The ubiquitin-activating enzyme E1 as a therapeutic target for the treatment of leukemia and multiple myeloma. (2010) Blood. 115(11):2251-9.