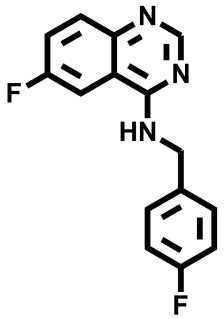
Xcess Biosciences Inc.
7144 N Harlem Ave #169
Chicago, IL 60631 USA

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

Autophagy Inhibitor Spautin-1

Chemical Name: 6-fluoro-N-(4-fluorobenzyl)quinazolin-4-amine



Molecular Weight:	271.26
Formula:	$C_{15}H_{11}F_2N_3$
Purity:	≥98%
CAS#:	1262888-28-7
Solubility:	DMSO up to 100 mM
Storage	Powder: 4°C 1 year DMSO: 4°C 3 month -20°C 1 year

Biological Activity:

Spautin-1 is a potent autophagy inhibitor with an IC50 ~0.74 μM, and was discovered by an imaging-based screen. It can selectively promote the degradation of Vps34 complexes. Mechanistic studies showed that Spautin-1 inhibited two ubiquitin specific peptidases, USP10 and USP13, which target the Beclin1 subunit of Vps34 complexes. Since USP10 mediates the deubiquitination of p53, regulating deubiquitination activity of USP10 and USP13 by Beclin1 provides a mechanism for Beclin1 to control the levels of p53.

How to Use:

In vitro: Spautin-1 was used at 10 μM final concentration in the cellular assays.

In vivo: no in vivo use of Spautin-1 was reported so far.

Reference:

1. Liu J, et al. Beclin1 Controls the Levels of p53 by Regulating the Deubiquitination Activity of USP10 and USP13. (2011) Cell 147(1), 223-234.
2. Mancias JD, et al. Targeting Autophagy Addiction in Cancer. (2011) Oncotarget 2(12):1302-6