# Product Data Sheet

Product Name: A-893
Cat. No.: GC30503

## Chemical Properties

| | | | |
|---|---|---|---|
| Cas. No. | 1868232-32-9 | | |
| SMILES | O=C(CCNCCC1=CC(Cl)=C(Cl)C=C1)N(C2CCCCC2)CCNC[C@H](O)C3=CC=CC(N4)=C3OCC4=O | | |
| Formula | $C_{29}H_{38}Cl_2N_4O_4$ | M.Wt | 577.54 |
| Solubility | Soluble in DMSO | Storage | Store at -20°C |
| General tips | For obtaining a higher solubility , please warm the tube at 37 ℃ and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20℃ for several months. | | |
| Shipping Condition | Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request. | | |
| Structure | A-893 | | |

## Protocol

**Cell experiment:**

Human A549 lung carcinoma cells are chosen due to their high SMYD2 expression levels and wild-type p53 status. After 18 h of treatment with 10 μM of compound (e.g. A-893), changes in p53K370me1 are measured along with changes to overall p53 levels[1].


***Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com***
***Address: 10292 Central Ave. #205, Montclair, CA, USA***

References:

[1]. Sweis RF, et al. Discovery of A-893, A New Cell-Active Benzoxazinone Inhibitor of Lysine Methyltransferase SMYD2. ACS Med Chem Lett. 2015 Apr 29;6(6):695-700.

## Background

A-893 is a cell-active inhibitor of Methyltransferase SMYD2, with an IC50 of 2.8 nM.

The ratio of p53K370me1 to overall p53 levels is reduced, as expected, by treatment with either A-893 or AZ505. While this unexpectedly depicts a more robust response with AZ505, further dissection of the data provides clarity into the origin of this. While overall p53 levels are unaffected by A-893, a surprising >3-fold increase is observed with AZ505. Analysis of p53K370me1 levels reveals that inhibitor A-893 exhibited 42% reduction in the methyl mark, while AZ-505 is slightly less effective at 28% reduction[1].

[1]. Sweis RF, et al. Discovery of A-893, A New Cell-Active Benzoxazinone Inhibitor of Lysine Methyltransferase SMYD2. ACS Med Chem Lett. 2015 Apr 29;6(6):695-700.


***Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com***
***Address: 10292 Central Ave. #205, Montclair, CA, USA***