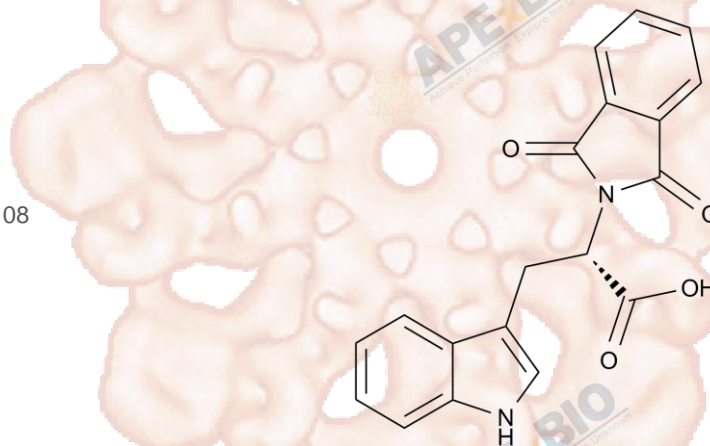


# Product Data Sheet

## RG 108

|                  |   |
|------------------|---|
| <b>Cat. No.:</b> | A1913   |
| <b>CAS No.:</b>  | 48208-26-0  |
| <b>Formula:</b>  | C <sub>19</sub> H <sub>14</sub> N <sub>2</sub> O <sub>4</sub> |
| <b>M.Wt:</b>     | 334.33  |
| <b>Synonyms:</b> | N-Phthalyl-L-tryptophan, RG108                                |
| <b>Target:</b>   | Chromatin/Epigenetics   |
| <b>Pathway:</b>  | DNA Methyltransferase   |
| <b>Storage:</b>  | Store at -20°C  |



## Solvent & Solubility

insoluble in H<sub>2</sub>O; ≥16.7 mg/mL in DMSO; ≥45.9 mg/mL in EtOH

In Vitro

| Preparing Stock Solutions | Mass                  |            |            |      |
|---------------------------|-----------------------|------------|------------|------|
|                           | Solvent Concentration | 1mg        | 5mg        | 10mg |
| 1 mM                      | 2.9911 mL             | 14.9553 mL | 29.9106 mL |      |
| 5 mM                      | 0.5982 mL             | 2.9911 mL  | 5.9821 mL  |      |
| 10 mM                     | 0.2991 mL             | 1.4955 mL  | 2.9911 mL  |      |

Please refer to the solubility information to select the appropriate solvent.

## Biological Activity

Shortsummary

DNA methyltransferase inhibitor

IC<sub>50</sub> & Target

600 nM (DNMT)

In Vitro

### Cell Viability Assay

Cell Line:

The human promyelocytic leukemia HL-60 cells.

Preparation method:

The solubility of this compound in DMSO is >10 mM. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

|         |                          |  |
|---------|--------------------------|--|
|         | Reacting conditions:     | 48 h; 50 $\mu$ M   |
|         | Applications:            | Cells were pretreated with 50 $\mu$ M RG108 for 48 h and then after removal of the inhibitor cultivated with 1 $\mu$ M RA for the next 4 days. Viable cell number was determined daily by counting in a hemocytometer after staining with 0.2% trypan blue. Cell cycle analysis of PI stained cells by flow cytometry demonstrated a slight decrease in the proportion of cells in S-phase (by 20% from control) after treatment with minor changes in G2/M. |
| In Vivo | <b>Animal experiment</b> |  |
|         | Applications:            |  |

## Product Citations

1. Zhang B, Wang W, et al. "Inositol polyphosphate-4-phosphatase type II plays critical roles in the modulation of cadherin-mediated adhesion dynamics of pancreatic ductal adenocarcinomas." Cell Adh Migr. 2018 Aug 19:1-16.PMID:29952716
2. Stenzig J, Schneeberger Y, et al. "Pharmacological inhibition of DNA methylation attenuates pressure overload-induced cardiac hypertrophy in rats." J Mol Cell Cardiol. 2018 May 21;120:53-63.PMID:29792884
3. Schneeberger, Yvonne, et al. "Pharmacokinetics of the Experimental Non - Nucleosidic DNA Methyl Transferase Inhibitor N - Phthalyl - L - Tryptophan (RG 108) in Rats." Basic & clinical pharmacology & toxicology (2015).PMID:26525153

See more customer validations on [www.apexbt.com](http://www.apexbt.com).

## References

- [1] Savickiene J, Treigyte G, Borutinskaite V V, et al. Antileukemic activity of combined epigenetic agents, DNMT inhibitors zebularine and RG108 with HDAC inhibitors, against promyelocytic leukemia HL-60 cells[J]. Cellular & molecular biology letters, 2012, 17(4): 501-525.

## Caution

**FOR RESEARCH PURPOSES ONLY.**

**NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**

Specific storage and handling information for each product is indicated on the product datasheet. Most APEX BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

---

## APExBIO Technology

[www.apexbt.com](http://www.apexbt.com)

7505 Fannin street, Suite 410, Houston, TX 77054.

Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: [info@apexbt.com](mailto:info@apexbt.com)

