

# RG108

**Catalog No: tcsc1248**



## Available Sizes

**Size:** 10mg

**Size:** 50mg



## Specifications

**CAS No:**

48208-26-0

**Formula:**

$C_{19}H_{14}N_2O_4$

**Pathway:**

Epigenetics

**Target:**

DNA Methyltransferase

**Purity / Grade:**

>98%

**Solubility:**

DMSO : 100 mg/mL (299.11 mM; Need ultrasonic)

**Alternative Names:**

N-Phthalyl-L-tryptophan

**Observed Molecular Weight:**

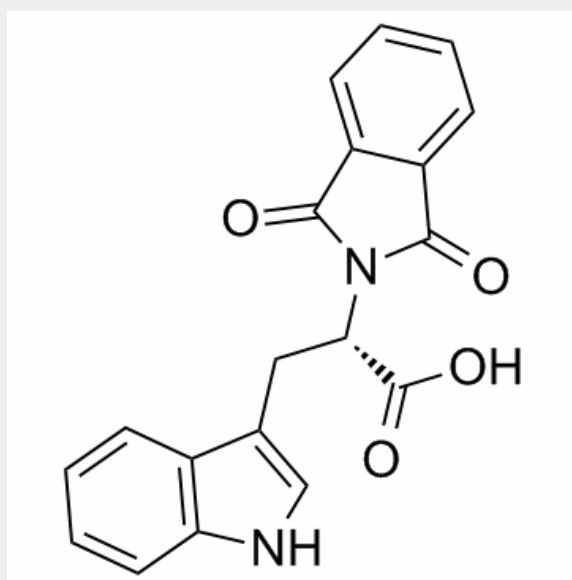
334.33

## Product Description

RG108 is a non-nucleoside inhibitor of **DNA methyltransferase** with **IC<sub>50</sub>** of 115 nM.

IC50 & Target: IC50: 115 nM (DNA methyltransferase)<sup>[1]</sup>

**In Vitro:** RG108 effectively blocks DNA methyltransferases in vitro and does not cause covalent enzyme trapping in human cell lines. Incubation of cells with low micromolar concentrations of RG108 results in significant demethylation of genomic DNA without any detectable toxicity. Intriguingly, RG108 causes demethylation and reactivation of tumor suppressor genes, but it does not affect the methylation of centromeric satellite sequences<sup>[1]</sup>. In another study, the synthesis and in vitro analysis of a biotinylated RG108 conjugate is investigated to evaluate the interactions with DNA methyltransferase enzymes<sup>[2]</sup>. In a recent study, it is shown RG108 can significantly reduce the DNA methyltransferases activity in SM derived iPS cells as compared to the native SMs<sup>[3]</sup>.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!