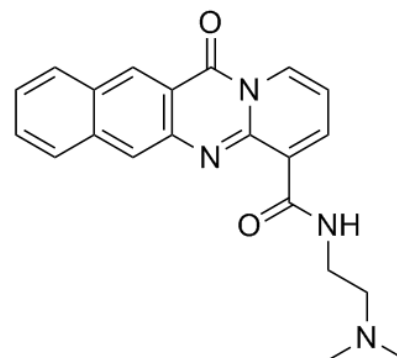


**Product Name** : BMH-21  
**Cat. No.** : PC-43056  
**CAS No.** : 896705-16-1  
**Molecular Formula** : C<sub>21</sub>H<sub>20</sub>N<sub>4</sub>O<sub>2</sub>  
**Molecular Weight** : 360.4091  
**Target** : DNA/RNA Synthesis  
**Solubility** : 10 mM in DMSO



## Biological Activity

BMH-21 is a RNA polymerase I inhibitor with wide and potent antitumorigenic activity across NCI60 cancer cell lines with mean GI<sub>50</sub> of 160 nM, interacts with GC-Rich rDNA, potently and rapidly represses **RNA polymerase I (Pol I)** transcription. BMH-21 inhibits the expression of 47S rRNA transcript with IC<sub>50</sub> of 60 nM, blocks transcription of the rRNA precursor without affecting rRNA maturation, and causes segregation of nucleolar proteins. BMH-21 causes proteasome-mediated degradation of RPA194 (Pol I catalytic subunit). BMH-21 activates p53 and inhibits TP53 null and mutant cell lines with GI<sub>50</sub> of 110 and 205 nM, respectively.

## References

- Peltonen K, et al. *Cancer Cell*. 2014 Jan 13;25(1):77-90.  
Colis L, et al. *J Med Chem*. 2014 Jun 12;57(11):4950-61.  
Colis L, et al. *Oncotarget*. 2014 Jun 30;5(12):4361-9.  
Peltonen K, et al. *Mol Cancer Ther*. 2014 Nov;13(11):2537-46.

**Caution: Product has not been fully validated for medical applications. Lab Use Only!**

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