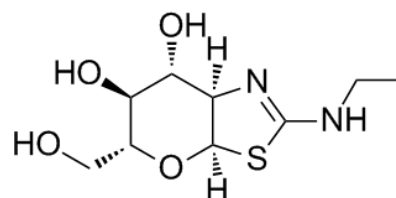


**Product Name** : Thiamet G  
**Cat. No.** : PC-43111  
**CAS No.** : 1009816-48-1  
**Molecular Formula** : C<sub>9</sub>H<sub>16</sub>N<sub>2</sub>O<sub>4</sub>S  
**Molecular Weight** : 248.2993  
**Target** : Other Targets  
**Solubility** : DMSO: ≥ 45 mg/mL



## Biological Activity

Thiamet-G is a potent, selective O-GlcNAcase inhibitor with K<sub>i</sub> of 21 nM for human O-GlcNAcase, blocks phosphorylation of tau both in vitro and in vivo; decreases phosphorylation of tau in PC-12 cells at pathologically relevant sites including Thr231 and Ser396, also efficiently reduces phosphorylation of tau at Thr231, Ser396 and Ser422 in both rat cortex and hippocampus, which reveals the rapid and dynamic relationship between O-GlcNAc and phosphorylation of tau in vivo; stimulates chondrogenic differentiation both in vitro and in vivo.

## References

Yuzwa SA, et al. Nat Chem Biol. 2008 Aug;4(8):483-90.

Goldberg H, et al. Am J Physiol Endocrinol Metab. 2011 Oct;301(4):E713-26.

Yuzwa SA, et al. Nat Chem Biol. 2012 Feb 26;8(4):393-9.

Andrés-Bergós J, et al. J Biol Chem. 2012 Sep 28;287(40):33615-28.

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

E-mail: tech@probechem.com