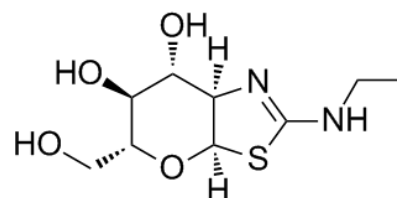


Product Name : Thiamet G
Cat. No. : PC-43111
CAS No. : 1009816-48-1
Molecular Formula : C₉H₁₆N₂O₄S
Molecular Weight : 248.2993
Target : Other Targets
Solubility : DMSO: ≥ 45 mg/mL



Biological Activity

Thiamet-G (Thiamet G) is a potent, selective **O-GlcNAcase (OGA)** inhibitor with K_i of 21 nM for human O-GlcNAcase, blocks phosphorylation of tau both in vitro and in vivo. Thiamet-G decreases phosphorylation of tau in PC-12 cells at pathologically relevant sites including Thr231 and Ser396. Thiamet-G 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. Thiamet-G stimulates chondrogenic differentiation both in vitro and in vivo.

References

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 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!

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