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Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	RSVA405
Cat. No.	:	PC-47019
CAS No.	:	140405-36-3
Molecular Formula	:	C ₁₇ H ₂₀ N ₄ O ₂
Molecular Weight	:	312.37
Target	:	AMPK
Solubility	:	10 mM in DMSO

N HO HO

Biological Activity

RSVA405 is a small-molecule activator of **AMPK**, facilitates CaMKK β -dependent activation of AMPK, inhibits mTOR and promotes autophagy to increase A β degradation by the lysosomal system with EC50 of 1 uM.

RSVA405 inhibited 3T3-L1 adipocyte differentiation by interfering with mitotic clonal expansion during preadipocyte proliferation with IC50 of 0.5 uM.

RSVA405 prevented the adipogenesis-dependent transcriptional changes of multiple gene products involved in the adipogenic process, including PPAR_{γ}, CCAAT/enhancer-binding protein α (C/EBP α), fatty acid synthase, fatty acid binding protein 4 (aP2), RANTES or resistin.

RSVA405 (20 and 100 mg/kg/d, oral) significantly reduced the body weight gain of mice fed a high-fat diet. RSVA405 potently inhibited both constitutive and stimulated STAT3 activity in HEK293 cells and LPS-stimulated RAW 264.7 macrophages, respectively.

References

Vingtdeux V, et al. *Mol Med.* 2011 Sep-Oct;17(9-10):1022-30. Capiralla H, et al. *FEBS J.* 2012 Oct;279(20):3791-9. Vingtdeux V, et al. *FASEB J.* 2011 Jan;25(1):219-31.

> Caution: Product has not been fully validated for medical applications. Lab Use Only! E-mail: tech@probechem.com