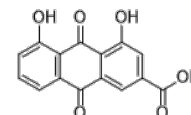


Product Name : Rhein
Cat. No. : PC-23548
CAS No. : 478-43-3
Molecular Formula : C₁₅H₈O₆
Molecular Weight : 284.22
Target : Histone Demethylase
Solubility : 10 mM in DMSO



Biological Activity

Rhein is a pan inhibitor of the ALKBH proteins, inhibits ALKBH2, ALKBH3 and FTO with IC₅₀ values of 9.1 μM, 5.3 μM and 21.0 μM, respectively.

Rhein also inhibits ALKBH5 with an IC₅₀ value of 9.96 μM.

Rhein binds to AlkB repair enzymes in vitro and promotes thermal stability in vivo.

Rhein inhibits FTO demethylation of N6-methyladenine in vitro and elevates the level of N6-methyladenine within mRNA in HeLa cells.

Rhein efficiently inhibits AlkB without inhibiting the glycosylase AlkA or the methyltransferase Ada in vitro.

References

Q. Li, et al. J. Biol. Chem., 291 (21) (2016), pp. 11083-11093

B. Chen, et al. J. Am. Chem. Soc., 134 (43) (2012), pp. 17963-17971

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

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