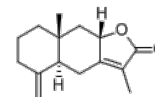


Product Name : Atractylenolide II
Cat. No. : PC-21185
CAS No. : 73069-14-4
Molecular Formula : C₁₅H₂₀O₂
Molecular Weight : 232.32
Target : Diacylglycerol Kinase (DGK)
Solubility : 10 mM in DMSO



Biological Activity

Atractylenolide II (AT II, Asterolide) is a sesquiterpene natural compound with anti-proliferative activity, also is a potent, specific allosteric activator of diacylglycerol kinase family member DGKQ (binding KD=1.75 uM, MST assay).

Atractylenolide II is an inhibitor of the sn-1,2-DAG-PKCε pathway.

Atractylenolide II improves obesity-induced hyperlipidemia, hepatic steatosis, and insulin resistance, inhibits gluconeogenesis and promotes glycogen synthesis through the insulin-sensitive IRS1-PI3K-AKT pathway.

Atractylenolide II improves insulin resistance and hepatic steatosis in ob/ob or DIO mice by inhibiting gluconeogenesis and increasing hepatic glycogen synthesis.

Atractylenolide II reduces proteolysis of DGKQ but not of DGKA, DGKE, DGKZ, and ACTB.

References

Zu-Guo Zheng, et al. Cell Metab. 2023 Jan 3;35(1):101-117.e11.

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

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