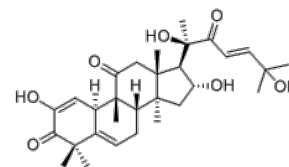


Product Name : Cucurbitacin I
Cat. No. : PC-60456
CAS No. : 2222-07-3
Molecular Formula : C₃₀H₄₂O₇
Molecular Weight : 514.7
Target : STAT
Solubility : 10 mM in DMSO



Biological Activity

Cucurbitacin I (JSI-124) is a triterpenoid compound that potently and selectively inhibits **JAK/STAT3** pathway, suppresses the levels of phosphotyrosine STAT3 in A549 cell with IC₅₀ of 500 nM.

Cucurbitacin I shows high selectivity for JAK/STAT3 and does not inhibit other oncogenic and tumor survival pathways such as Akt, ERK1/2, JNK.

Cucurbitacin I inhibits STAT3 DNA binding and STAT3-mediated gene transcription, also decreases the levels of tyrosine-phosphorylated JAK but not Src.

Cucurbitacin I also inhibits Rac1 activation in breast cancer cells.

References

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Nefedova Y, et al. *Cancer Res.* 2005 Oct 15;65(20):9525-35.

Lopez-Haber C, et al. *Mol Pharmacol.* 2013 May;83(5):1141-54.

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

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