

Data Sheet

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 Product Name
 :
 LLL12

 Cat. No.
 :
 PC-60938

 CAS No.
 :
 1260247-42-4

 Molecular Formula
 :
 C₁₄H₉NO₅S

 Molecular Weight
 :
 303.29

Target : STAT

Solubility : 10 mM in DMSO



Biological Activity

LLL12 is a nonpeptide, cell-permeable **STAT3** inhibitor that binds directly to the pTyr705 binding site of the STAT3 monomer.

LLL12 inhibit STAT3 phosphorylation (tyrosine 705) and induces apoptosis in various breast, pancreatic, and glioblastoma cancer cell lines with IC50 of 0.16-3.09 uM.

LLL12 also inhibits STAT3 phosphorylation induced by IL-6 and IFN- α in MM cells, but not STAT1, STAT2, STAT4 and STAT6 phosphorylation.

LLL12 inhibits STAT3 DNA binding activity and STAT3-dependent transcriptional activity, but not STAT1.

LLL12 exhibits potent inhibitory activity on breast and glioblastoma tumor growth in a mouse xenograft model.

References

Lin L, et al. Int J Cancer. 2012 Mar 15;130(6):1459-69.

Lin L, et al. *Neoplasia*. 2010 Jan;12(1):39-50.

Liu Y, et al. *J Biol Chem.* 2010 Aug 27;285(35):27429-39.

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

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