

Data Sheet

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Product Name : Tilpisertib

Cat. No. : PC-38374

CAS No. : 2065153-41-3

Molecular Formula : C₃₃H₃₃ClN₈O

Molecular Weight : 593.132

Target : MEKK (MAP3K)

Solubility : 10 mM in DMSO

N=N HN HN

Biological Activity

Tilpisertib (GS-4875) is a potent, highly selective **TPL2** kinase (COT, **MAP3K8**) inhibitor with IC50 of 1.3 nM, with no significant off-target binding activity.

Tilpisertib (GS-4875) selectively inhibited LPS and TNF α -stimulated phosphorylation of TPL2, MEK, and ERK, with little to no inhibition of phosphorylated p38, JNK or p65.

Tilpisertib (GS-4875) similarly inhibited in the RNA production and secretion of TNF α , IL-1 β , IL-6, and IL-8 following LPS stimulation in primary human monocytes.

Tilpisertib (GS-4875) inhibited the secretion of TNF α and IL-6 following LPS stimulation in monocyte-derived dendritic cells. Tilpisertib (GS-4875) reduced TNF α -stimulated pERK with no effect on ERK activation downstream of EGF in A431 cells stimulated with either TNF α or EGF.

Tilpisertib (GS-4875) treatment showed dose and exposure dependent inhibition (IC50=667 nM) of LPS-stimulated TNF α production a rat LPS-TNF α model of acute inflammation.

References

Matthew Warr, et al. Meeting: 2019 ACR/ARP Annual Meeting.

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

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