

Data Sheet

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 Product Name
 :
 JTE-607

 Cat. No.
 :
 PC-72476

 CAS No.
 :
 188791-09-5

 Molecular Formula
 :
 C₂₅H₃₃Cl₄N₃O₅

Molecular Weight : 597.36

Target : Other Targets

Solubility : 10 mM in DMSO

Biological Activity

JTE-607 (JTE607) is a multiple cytokine inhibitor that potently suppresses production of proinflammatory cytokines, targets pre-messenger RNA endonuclease cleavage and polyadenylation specificity factor 3 (**CPSF3**).

JTE-607 exhibits inhibitory activity on the growth of AML cell lines accompanying reduction of the proinflammatory cytokine and growth factor production.

JTE-607 suppressed expression and production of cytokines, which are spontaneously up-regulated in AML cell lines. JTE-607 also abrogated proliferation of AML cells in a concentration range in which colony formation of normal bone marrow cells was not affected.

JTE-607 significantly prolonged survival in mice and reduced human cytokine mRNA levels in the bone marrow in leukemia model engrafted with U-937 cells.

Inhibition of CPSF3 by JTE-607 alters expression of known downstream effectors in AML and Ewing's sarcoma lines, upregulates apoptosis and causes tumor-selective stasis in mouse xenografts.

JTE-607 induces transcript accumulation and RNA Pol II read-through. CPSF3 is a core component of the pre-mRNA cleavage and polyadenylation complex.

References

Tajima N, et al. *Cancer Sci.* 2010 Mar;101(3):774-81.

Uesato N, et al. *Exp Hematol.* 2006 Oct;34(10):1385-92.

Iwamura H, et al. *J Pharmacol Exp Ther*. 2004 Dec;311(3):1256-63.

Ross NT, et al. *Nat Chem Biol.* 2020 Jan;16(1):50-59.

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

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