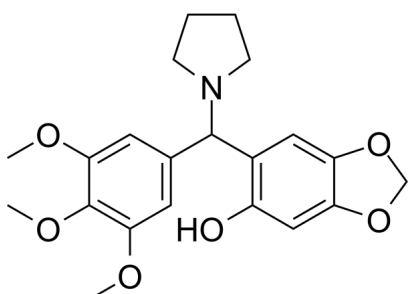


Certificate of Analysis

Catalog Number	BP15255
Product Name	NSC 370284

Physical and Chemical Properties

CAS No.	116409-29-1
Chemical Formula	C ₂₁ H ₂₅ NO ₆
Molecular Weight	387.43
Solubility	
Storage	Powder: -20°C for 2 years In solvent: -80°C for 1 year
Chemical Structure OR Tested Image	 <p>The chemical structure of NSC 370284 is a complex molecule. It features a central carbon atom bonded to a pyrrolidine ring (a five-membered ring with one nitrogen atom), a hydroxyl group (HO), and two aromatic rings. One aromatic ring is a 3,4,5-trimethoxyphenyl group (a benzene ring with three methoxy groups at the 3, 4, and 5 positions). The other aromatic ring is a 2,3-dihydrobenzofuran group (a benzene ring fused to a five-membered ring containing one oxygen atom, with two hydrogen atoms at the 2 and 3 positions).</p>

Product Information

Description	NSC 370284 is a small molecule that directly binds to and inhibits STAT3/5, significantly and selectively suppresses the viability of AML cells with high level of TET1 expression both in vitro and in vivo.
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In vitro	NSC-370284 exhibited the most significant effects in inhibiting cell viability of all four TET1-high AML cell lines, whereas showing no significant inhibition on viability of NB4/t(15;17) AML cells .The direct binding of STAT3 and STAT5 on the TET1 loci was further validated in MONOMAC-6 cells, and such binding could be disturbed by NSC-370284 treatment .Analysis suggested a potential direct binding of NSC-370284 to the conserved DNA-binding domain (DBD) of STAT3 or STAT5 .
In vivo	NSC 370284 treatments significantly inhibited MLL-AF9-induced AML in secondary bone marrow transplantation (BMT) recipient mice, and 57% (4 out of 7) of the NSC-370284-treated mice were cured, as the pathological morphologies in peripheral blood (PB), BM, spleen, and liver tissues all turned to normal.

Analytical Data

HPLC	Shows Min >99% purity
H-NMR	Consistent with structure
Stability and Solubility Advice	Information on product stability, especially in solution, has rarely been reported and in most cases we can only provide a general guideline. We recommend that once the stock solution has been prepared, it be stored in equal quantities in sealed vials and used within 1 month. Avoid repeated freezing and thawing cycles. Storage conditions for some special products should be referred to their storage details.

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