



SZABO SCANDIC

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC Handels GmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

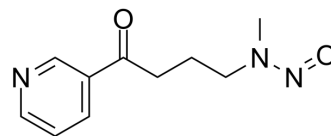
mail@szabo-scandic.com

www.szabo-scandic.com

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

NNK

Cat. No.:	HY-126477
CAS No.:	64091-91-4
Molecular Formula:	C ₁₀ H ₁₃ N ₃ O ₂
Molecular Weight:	207.23
Target:	Endogenous Metabolite
Pathway:	Metabolic Enzyme/Protease
Storage:	Powder -20°C 3 years In solvent -80°C 6 months -20°C 1 month



SOLVENT & SOLUBILITY

In Vitro	DMSO : ≥ 62.5 mg/mL (301.60 mM)					
	* "≥" means soluble, but saturation unknown.					
	Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg
		1 mM		4.8256 mL	24.1278 mL	48.2556 mL
		5 mM		0.9651 mL	4.8256 mL	9.6511 mL
		10 mM		0.4826 mL	2.4128 mL	4.8256 mL
Please refer to the solubility information to select the appropriate solvent.						
In Vivo	1. Add each solvent one by one: 1% CMC-Na/saline water Solubility: 3.33 mg/mL (16.07 mM); Clear solution; Need ultrasonic and warming and heat to 50°C					

BIOLOGICAL ACTIVITY

Description	NNK is a nicotine-nitrosated derivative. NNK simultaneously stimulates Bcl2 phosphorylation exclusively at Ser ⁷⁰ and c-Myc at Thr ⁵⁸ and Ser ⁶² through activation of both ERK1/2 and PKCα ^[1] . NNK induces survival and proliferation of human lung cancer cells. NNK can be used for lung cancer mice model structure ^[2] .
IC ₅₀ & Target	ERK1, ERK2, PKCα, Bcl2, c-Myc ^[1]
In Vitro	NNK (100 pM; 0-60 min) stimulates activation of PKCα and MAPKs ERK1/2 that directly induce c-Myc phosphorylation ^[1] . NNK (100 pM; 96 hours) enhances proliferation of cells expressing WT but not AA c-Myc mutant ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only. Western Blot Analysis

Cell Line:	NCI-H82 cells ^[1]
Concentration:	100 pM
Incubation Time:	0-60 min
Result:	Stimulated activation of PKC α and MAPKs ERK1/2 that directly induced c-Myc phosphorylation.
Apoptosis Analysis	
Cell Line:	H1299 lung cancer cells ^[1]
Concentration:	100 pM
Incubation Time:	96 hours
Result:	Enhanced proliferation of cells expressing WT but not T58A/S62A c-Myc mutant.

REFERENCES

[1]. Jin Z, et al. Tobacco-specific nitrosamine 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone promotes functional cooperation of Bcl2 and c-Myc through phosphorylation in regulating cell survival and proliferation. J Biol Chem. 2004;279(38):40209-40219.

[2]. Castonguay A, et al. Lung tumorigenicity of NNK given orally to A/J mice: its application to chemopreventive efficacy studies. Exp Lung Res. 1991;17(2):485-499.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA