



# 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 HandelsgmbH

Quellenstraße 110, A-1100 Wien

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

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

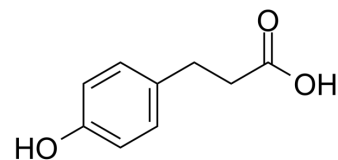
[mail@szabo-scandic.com](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

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

## Desaminotyrosine

<b>Cat. No.:</b>	HY-W015346		
<b>CAS No.:</b>	501-97-3		
<b>Molecular Formula:</b>	C <sub>9</sub> H <sub>10</sub> O <sub>3</sub>		
<b>Molecular Weight:</b>	166.18		
<b>Target:</b>	Influenza Virus; Endogenous Metabolite		
<b>Pathway:</b>	Anti-infection; Metabolic Enzyme/Protease		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 100 mg/mL (601.76 mM; Need ultrasonic)  
 H<sub>2</sub>O : 33.33 mg/mL (200.57 mM; Need ultrasonic)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	6.0176 mL	30.0879 mL	60.1757 mL
	5 mM	1.2035 mL	6.0176 mL	12.0351 mL
	10 mM	0.6018 mL	3.0088 mL	6.0176 mL

Please refer to the solubility information to select the appropriate solvent.

#### In Vivo

- Add each solvent one by one: PBS  
Solubility: 100 mg/mL (601.76 mM); Clear solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
Solubility: ≥ 2.5 mg/mL (15.04 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: ≥ 2.5 mg/mL (15.04 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: ≥ 2.5 mg/mL (15.04 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

Desaminotyrosine is a microbially associated metabolite protecting from influenza through augmentation of type I interferon signaling.

#### IC<sub>50</sub> & Target

Microbial Metabolite      Human Endogenous Metabolite

## In Vivo

Wild-type mice produce nanomoles of Desaminotyrosine per gram of feces and have picomolar quantities of Desaminotyrosine in the serum. Desaminotyrosine (200 mM) treatment before influenza infection, protects from influenza by type I interferon (IFN) signaling, with no effect on weight loss or survival in mice with or without vancomycin, neomycin, ampicillin, and metronidazole (VNAM). Desaminotyrosine enhances type I IFN in macrophages via type I IFN amplification in mice<sup>[1]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## PROTOCOL

### Animal Administration <sup>[1]</sup>

Mice<sup>[1]</sup>

Indicated mice receive 200 mM Desaminotyrosine dissolved in Kool-Aid in the drinking water (control animals receive Kool-Aid alone). Indicated mice receive poly(IC) injections of 1 mg/kg for vancomycin, neomycin, ampicillin, and metronidazole (VNAM) treated mice or 5 mg/kg for all other mice intraperitoneally daily for 4 days, and then mice are scarified on day five at which time serum is collected<sup>[1]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## REFERENCES

[1]. Steed AL, et al. The microbial metabolite desaminotyrosine protects from influenza through type I interferon. *Science*. 2017 Aug 4;357(6350):498-502.

**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