



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

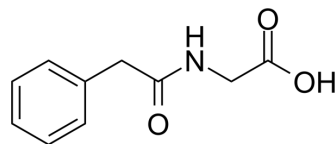
mail@szabo-scandic.com

www.szabo-scandic.com

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

Phenylacetylglucine

Cat. No.:	HY-W015061		
CAS No.:	500-98-1		
Molecular Formula:	C ₁₀ H ₁₁ NO ₃		
Molecular Weight:	193.2		
Target:	Endogenous Metabolite; Adrenergic Receptor; Apoptosis		
Pathway:	Metabolic Enzyme/Protease; GPCR/G Protein; Neuronal Signaling; Apoptosis		
Storage:	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 (517.60 mM; Need ultrasonic)			
		Solvent Concentration	Mass	
			1 mg	5 mg
			10 mg	
Preparing Stock Solutions	1 mM	5.1760 mL	25.8799 mL	51.7598 mL
	5 mM	1.0352 mL	5.1760 mL	10.3520 mL
	10 mM	0.5176 mL	2.5880 mL	5.1760 mL
Please refer to the solubility information to select the appropriate solvent.				
In Vivo	<ol style="list-style-type: none"> Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 0.83 mg/mL (4.30 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 0.83 mg/mL (4.30 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 0.83 mg/mL (4.30 mM); Clear solution 			

BIOLOGICAL ACTIVITY

Description	Phenylacetylglucine is a gut microbial metabolite that can activate β2AR. Phenylacetylglucine protects against cardiac injury caused by ischemia/reperfusion ^[1] .		
IC₅₀ & Target	β2 adrenoceptor	Microbial Metabolite	Human Endogenous Metabolite
In Vitro	Phenylacetylglucine (10-100 μM; 30 min before H/R injury) reduces disreoxygenation (H/R) injury-induced apoptosis and activates Gai and Gas signaling in neonatal mouse cardiomyocytes (NMCMs) ^[1] .		

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

Apoptosis Analysis^[1]

Cell Line:	Neonatal mouse cardiomyocytes (NMCMS)
Concentration:	10, 33 and 100 μ M
Incubation Time:	Half an hour before H/R injury
Result:	Inhibited disrexygenation injury induced apoptosis.

Western Blot Analysis^[1]

Cell Line:	Neonatal mouse cardiomyocytes (NMCMS)
Concentration:	10, 33 and 100 μ M
Incubation Time:	Half an hour before H/R injury
Result:	Significantly decreased the ratio of Bax/Bcl2 and cleaved-caspase 3 expression. Enhanced p-PI3K protein expression. cAMP levels were increased in the early stage and then gradually decreased.

CUSTOMER VALIDATION

- Adv Sci (Weinh). 2024 Mar 13:e2306297.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Xu X, et al. The gut microbial metabolite phenylacetylglutamine protects against cardiac injury caused by ischemia/reperfusion through activating β 2AR. Arch Biochem Biophys. 2021 Jan 15;697:108720.

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