



# 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

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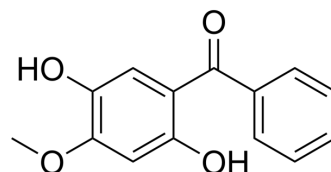
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## Cearoin

Cat. No.:	HY-N8418
CAS No.:	52811-37-7
Molecular Formula:	C <sub>14</sub> H <sub>12</sub> O <sub>4</sub>
Molecular Weight:	244.24
Target:	ERK; Autophagy; Apoptosis; Reactive Oxygen Species
Pathway:	MAPK/ERK Pathway; Stem Cell/Wnt; Autophagy; Apoptosis; Immunology/Inflammation; Metabolic Enzyme/Protease; NF-κB
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 50 mg/mL (204.72 mM; Need ultrasonic)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
1 mM		4.0943 mL	20.4717 mL	40.9433 mL
5 mM		0.8189 mL	4.0943 mL	8.1887 mL
10 mM		0.4094 mL	2.0472 mL	4.0943 mL

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

### BIOLOGICAL ACTIVITY

#### Description

Cearoin increases autophagy and apoptosis through the production of ROS and the activation of ERK<sup>[1]</sup>.

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

ERK	ROS	Autophagy	Apoptosis
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#### In Vitro

Cearoin (10-80 μM) induces cell death in a dose-dependent manner<sup>[1]</sup>.  
 Cearoin (10-80 μM) increases the phosphorylation of ERK in SH-SY5Y cells<sup>[1]</sup>.  
 Cearoin (5-80 μM) increases the conversion of LC3B-I to LC3B-II in SH-SY5Y cells. The expression of LC3B-II is a good marker for autophagosome formation in the autophagy process<sup>[1]</sup>.  
 MCE has not independently confirmed the accuracy of these methods. They are for reference only.  
 Cell Viability Assay<sup>[1]</sup>

Cell Line:	Human neuroblastoma SH-SY5Y cells
Concentration:	0, 1, 5, 10, 20, 40, or 80 μM
Incubation Time:	6 or 12 hours

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Result:	Significantly decreased cell viability from 10 $\mu$ M in a dose-dependent manner. Treatment with 40 $\mu$ M for 12 h induced about 50% loss in cell viability in SH-SY5Y cells.
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Western Blot Analysis<sup>[1]</sup>

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Cell Line:	Human neuroblastoma SH-SY5Y cells
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Concentration:	0, 5, 10, 20, 40, or 80 $\mu$ M
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Incubation Time:	12 hours
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Result:	Increased ERK phosphorylation in a dose-dependent manner, whereas it did not alter JNK phosphorylation. Induced the formation of LC3B-II in a dose dependent manner.
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## REFERENCES

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[1]. Tonking Bastola, et al. Ceatoin Induces Autophagy, ERK Activation and Apoptosis via ROS Generation in SH-SY5Y Neuroblastoma Cells. *Molecules*. 2017 Feb 6;22(2):242.

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

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