



# 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

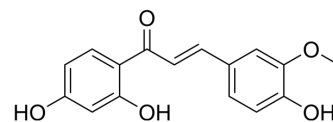
[mail@szabo-scandic.com](mailto:mail@szabo-scandic.com)

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

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

## Homobutein

Cat. No.:	HY-N8707
CAS No.:	34000-39-0
Molecular Formula:	C <sub>16</sub> H <sub>14</sub> O <sub>5</sub>
Molecular Weight:	286.28
Target:	Parasite; HDAC; NF-κB
Pathway:	Anti-infection; Cell Cycle/DNA Damage; Epigenetics; NF-κB
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Homobutein a natural chalcones (can be found in many medicinal plants, fruits, vegetables, spices and nuts), is a potent HDACs/NF-κB dual inhibitor with IC <sub>50</sub> s of 190 and 38 μM, respectively. Homobutein also a chelator of iron (II and III) cations, shows various activities, including anticancer, anti-inflammatory, antiparasite and antioxidation <sup>[1][2][3][4]</sup> .																	
<b>IC<sub>50</sub> &amp; Target</b>	Toxoplasma	Toxoplasma																
<b>In Vitro</b>	<p>Homobutein (compound 15) (20, 24, 28, 32, 40 μM; 2 h) inhibits the viability of K562 cells<sup>[1]</sup>.</p> <p>Homobutein (2 h) inhibits TNFα-induced NF-κB activity in K562 cells<sup>[1]</sup>.</p> <p>Homobutein (1 μg/mL; 72 h) inhibits the growth of Toxoplasma gondii by 19.48%<sup>[2]</sup>.</p> <p>Homobutein (24 h) againsts W2 and D6 strains of P.falciparum with IC<sub>50</sub>s of 15.0 and 16.1 μM, respectively<sup>[3]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Cell Viability Assay<sup>[1]</sup></p> <table border="1"> <tr> <td>Cell Line:</td> <td>K562 cells</td> </tr> <tr> <td>Concentration:</td> <td>20, 24, 28, 32, 40 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>2 h</td> </tr> <tr> <td>Result:</td> <td>Showed inhibition of viability in K562 cells.</td> </tr> </table> <p>Cell Viability Assay<sup>[2]</sup></p> <table border="1"> <tr> <td>Cell Line:</td> <td>Toxoplasma gondii RH-2F strain</td> </tr> <tr> <td>Concentration:</td> <td>1 μg/mL</td> </tr> <tr> <td>Incubation Time:</td> <td>72 h</td> </tr> <tr> <td>Result:</td> <td>Suppressed 19.48% of the Toxoplasma gondii.</td> </tr> </table>		Cell Line:	K562 cells	Concentration:	20, 24, 28, 32, 40 μM	Incubation Time:	2 h	Result:	Showed inhibition of viability in K562 cells.	Cell Line:	Toxoplasma gondii RH-2F strain	Concentration:	1 μg/mL	Incubation Time:	72 h	Result:	Suppressed 19.48% of the Toxoplasma gondii.
Cell Line:	K562 cells																	
Concentration:	20, 24, 28, 32, 40 μM																	
Incubation Time:	2 h																	
Result:	Showed inhibition of viability in K562 cells.																	
Cell Line:	Toxoplasma gondii RH-2F strain																	
Concentration:	1 μg/mL																	
Incubation Time:	72 h																	
Result:	Suppressed 19.48% of the Toxoplasma gondii.																	

### REFERENCES

- 
- [1]. Orlikova B, et al. Natural chalcones as dual inhibitors of HDACs and NF- $\kappa$ B. *Oncol Rep.* 2012 Sep;28(3):797-805.
- [2]. Adeyemi OS, et al. In Vitro Screening to Identify Anti-Toxoplasma Compounds and In Silico Modeling for Bioactivities and Toxicity. *Yale J Biol Med.* 2019 Sep 20;92(3):369-383.
- [3]. Yenesew A, et al. Anti-plasmodial flavonoids from the stem bark of *Erythrina abyssinica*. *Phytochemistry.* 2004 Nov;65(22):3029-32.
- [4]. Serobatse K, et al. Antioxidant and antimalarial properties of butein and homobutein based on their ability to chelate iron (II and III) cations: a DFT study in vacuo and in solution. *European Food Research and Technology*, 2016, 242(1): 71-90.
- 

**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](mailto:tech@MedChemExpress.com)

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