



# 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

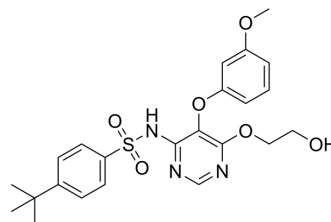
[mail@szabo-scandic.com](mailto:mail@szabo-scandic.com)

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

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

## Ro 46-2005

<b>Cat. No.:</b>	HY-19529		
<b>CAS No.:</b>	150725-87-4		
<b>Molecular Formula:</b>	C <sub>23</sub> H <sub>27</sub> N <sub>3</sub> O <sub>6</sub> S		
<b>Molecular Weight:</b>	473.54		
<b>Target:</b>	Endothelin Receptor		
<b>Pathway:</b>	GPCR/G Protein		
<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 (211.18 mM; Need ultrasonic)

Concentration	Solvent	Mass	1 mg			5 mg			10 mg		
			Concentration			Concentration			Concentration		
1 mM			2.1118 mL			10.5588 mL			21.1175 mL		
5 mM			0.4224 mL			2.1118 mL			4.2235 mL		
10 mM			0.2112 mL			1.0559 mL			2.1118 mL		

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

#### In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
Solubility: ≥ 2.5 mg/mL (5.28 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: ≥ 2.5 mg/mL (5.28 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: ≥ 2.5 mg/mL (5.28 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

Ro 46-2005 is a novel synthetic non-peptide endothelin receptor antagonist, inhibits the specific binding of <sup>125</sup>I-ET-1 to human vascular smooth muscle cells (ETA receptor) with IC<sub>50</sub> of 220 nM. IC<sub>50</sub> value: 220 nM (ETA) [2] Target: Endothelinin vitro: Ro 46-2005 proves to be equipotent (IC<sub>50</sub> 200-500 nM) for inhibition of [<sup>125</sup>I]ET-1 binding on the two known ET receptor subtypes (ETA and ETB). Ro 46-2005 also inhibits the functional consequences of ET-1 stimulation: the ET-1-induced release of arachidonic acid from rat mesangial cells was inhibited with an IC<sub>50</sub> of 1.8 μM.[1]

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

ET<sub>A</sub>

---

## REFERENCES

- [1]. Breu V, et al. In vitro characterization of Ro 46-2005, a novel synthetic non-peptide endothelin antagonist of ETA and ETB receptors. FEBS Lett. 1993 Nov 15;334(2):210-214.
- [2]. Clozel M, et al. Pathophysiological role of endothelin revealed by the first orally active endothelin receptor antagonist. Nature. 1993 Oct 21;365(6448):759-761.
- [3]. N.R. Sibson, et al. MRI Determination of the Mechanisms Underlying TNF- $\alpha$ -induced Changes in Cerebral Blood Volume, Tissue Water Diffusion and BBB Permeability. Proc. Intl. Soc. Mag. Reson. Med. 10 (2002)
- 

**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