



# 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 Handels GmbH

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)



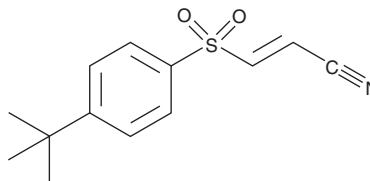
# PRODUCT INFORMATION



## BAY 11-7085

Item No. 14795

**CAS Registry No.:** 196309-76-9  
**Formal Name:** 3-[[4-(1,1-dimethylethyl)phenyl]sulfonyl]-2E-propenenitrile  
**MF:** C<sub>13</sub>H<sub>15</sub>NO<sub>2</sub>S  
**FW:** 249.3  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 205, 252 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

BAY 11-7085 is supplied as a crystalline solid. A stock solution may be made by dissolving the BAY 11-7085 in the solvent of choice. BAY 11-7085 is soluble in organic solvents such as ethanol and DMSO, which should be purged with an inert gas. The solubility of BAY 11-7085 in these solvents is approximately 20 mg/ml.

BAY 11-7085 is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

### Description

In the classical pathway of NF-κB activation, phosphorylation of the inhibitor of NF-κB (IκBα) releases the inhibitor from NF-κB, allowing IκBα degradation and NF-κB activation and nuclear import.<sup>1</sup> BAY 11-7085 is an irreversible inhibitor of IκBα phosphorylation, preventing activation of NF-κB by cytokines and lipopolysaccharide (IC<sub>50</sub> = 10 μM).<sup>2</sup> It blocks gene expression that is regulated through the classical pathway of NF-κB activation and in this way blocks apoptosis, cell adhesion, and inflammation.<sup>2-4</sup> BAY 11-7085 is also used to study IκBα actions that are independent of NF-κB signaling.<sup>5</sup>

### References

1. Wajant, H. and Scheurich, P. TNFR1-induced activation of the classical NF-κB pathway. *FEBS J.* **278**(6), 862-876 (2011).
2. Pierce, J.W., Schoenleber, R., Jesmok, G., *et al.* Novel inhibitors of cytokine-induced IκBα phosphorylation and endothelial cell adhesion molecule expression show anti-inflammatory effects *in vivo*. *J. Biol. Chem.* **272**(34), 21096-21103 (1997).
3. Scaife, C.L., Kuang, J., Wills, J.C., *et al.* Nuclear factor κB inhibitors induce adhesion-dependent colon cancer apoptosis: Implications for metastasis. *Cancer Res.* **62**(23), 6870-6878 (2002).
4. Di Giuseppe, M., Gambelli, F., Hoyle, G.W., *et al.* Systemic inhibition of NF-κB activation protects from silicosis. *PLoS One* **4**(5), e5689 (2009).
5. Hu, X., Janssen, W.E., Moscinski, L.C., *et al.* An IκBα inhibitor causes leukemia cell death through a p38 MAP kinase-dependent, NF-κB-independent mechanism. *Cancer Res.* **61**(16), 6290-6296 (2001).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 11/15/2022

#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897  
[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM