



# SZABO SCANDIC

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## Produktinformation



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Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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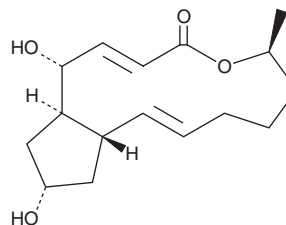
# PRODUCT INFORMATION



## Brefeldin A

Item No. 11861

**CAS Registry No.:** 20350-15-6  
**Formal Name:** (1R,2E,6S,10E,11aS,13S,14aR)-1,6,7,8,9,11a,12,13,14,14a-decahydro-1,13-dihydroxy-6-methyl-4H-cyclopent[f]oxacyclotridecin-4-one  
**Synonyms:** Ascotoxin, BFA, Cyanein, Decumbin, Nectrolide, NSC 56310, NSC 89671, NSC 107456, NSC 244390, Synergisidin  
**MF:** C<sub>16</sub>H<sub>24</sub>O<sub>4</sub>  
**FW:** 280.4  
**Purity:** ≥98%  
**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

Brefeldin A (BFA) is supplied as a crystalline solid. A stock solution may be made by dissolving the BFA in the solvent of choice. BFA is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of BFA in these solvents is approximately 1, 10, and 5 mg/ml, respectively.

BFA is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, BFA should first be dissolved in DMF and then diluted with the aqueous buffer of choice. BFA has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Brefeldin A (BFA) is a natural fungal metabolite which has been used extensively to study intracellular transport by vesicles or endosomes. Early studies demonstrated that BFA reversibly interferes with protein trafficking and secretion mediated by the Golgi apparatus and endoplasmic reticulum.<sup>1-3</sup> BFA directly and reversibly inhibits Sec7 domain-containing guanine-exchange factors which are necessary for ADP-ribosylation factor activation associated with vesicular transport (IC<sub>50</sub> = ~10 μM).<sup>4-6</sup> BFA is used to study endosomal trafficking and function in cells of plants as well as those of fungi, invertebrates, and vertebrates.<sup>7,8</sup>

### References

1. Fujiwara, T., Oda, K., Yokota, S., *et al. J. Biol. Chem.* **263**(34), 18545-18552 (1988).
2. Ayala, J. J. *Cell Sci.* **107**, 753-763 (1994).
3. Thyberg, J. and Moskalewski, S. *Exp. Cell Res.* **246**, 263-279 (1999).
4. Klausner, R.D., Donaldson, J.G., and Lippincott-Schwartz, J. *J. Cell Biol.* **116**(5), 1071-1080 (1992).
5. Moss, J. and Vaughan, M. *Mol. Cell. Biochem.* **193**, 153-157 (1999).
6. Vigil, D., Cherfils, J., Rossman, K.L., *et al. Nat. Rev. Cancer* **10**(12), 842-857 (2010).
7. Robinson, D.G., Jiang, L., and Schumacher, K. *Plant Physiol.* **147**, 1482-1492 (2008).
8. Nebenführ, A., Ritzenthaler, C., and Robinson, D.G. *Plant Physiol.* **130**, 1102-1108 (2002).

#### 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.

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