

## Brefeldin A Solution (1,000X)

**Catalog # / Size:** 420601 / 1 ml

**Formulation:** Brefeldin A Solution is supplied as a 1000X in DMSO, which should be diluted to 1X in cell culture medium.

**Concentration:** 5.0 mg/ml

**Storage:** Store the Brefeldin A Solution (1,000X) between 2°C and 8°C. Note: DMSO freezes at this temperature.

## Applications:

**Applications:** ICFC - *Quality tested*

**Recommended Usage:** Dilute the 1000X solution to 1X in the tissue culture medium. It is recommended that cells are cultured with brefeldin A for  $\leq$  24 hours, as this can become toxic for cell viability.

**Application Notes:** Completely thaw the solution before use, DMSO freezes at 4°C. We recommend aliquotting the reagent into smaller volumes to avoid repeated freeze-thawing.

- Application References:**
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  - Nguyen KD, *et al.* 2008. *J. Immunol.* 181:5386. PubMed
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  - Shi L, *et al.* 2014. *J. Immunol.* 192:649. PubMed
  - Bulati M, *et al.* 2014. *Exp Gerontol.* PubMed
  - Blankenhaus B, *et al.* 2014. *PLoS Pathog.* 10:1003913. PubMed
  - Tuna H, *et al.* 2014. *J Leukoc Biol.* 95:471. PubMed
  - Miller ML, *et al.* 2014. *PNAS.* 111:7397. PubMed
  - Wang Y, *et al.* 2014. *Sci Rep.* 4:5346. PubMed
  - Zhou GL, *et al.* 2014. *J Cell Sci.* 127:3916. PubMed
  - Rist MJ, *et al.* 2015. *J Virol.* 89:703. PubMed

**Description:** Brefeldin A (BFA) is a protein transport inhibitor commonly used to enhance intracellular cytokine staining signals by blocking transport processes during cell activation. Especially useful for the intracellular staining of cytokines, BFA leads to the accumulation of most cytokines at the Golgi Complex/Endoplasmic Reticulum (see Jung, *et al.*, 1993). Optimal conditions for use are cell type and time-dependent. Typically, protein transport inhibitors are included during *in vitro* cell activation cultures for 4-24 hours prior to harvest (see references below for additional information). Brefeldin A Solution is supplied as a 1,000X solution, which should be diluted to 1X in cell culture medium.

- Antigen References:**
- Current Protocols in Immunology (John Wiley & Sons New York) Unit 6.24 *Detection of Intracellular Cytokines by Flow Cytometry* (Barbara Foster and Calman Prussin NIAID NIH Bethesda MD).
  - Sander B, *et al.* 1991. *Immunol. Rev.* 119:65.
  - Sander B, *et al.* 1993. *J. Immunol. Meth.* 166:201.
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**Related Products:** **Product**  
Cell Staining Buffer

**Clone**

**Application**  
FC, ICC, ICFC



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Fixation Buffer  
Permeabilization Wash Buffer (10X)  
Monensin Solution (1,000X)

ICC, ICFC  
ICC, ICFC, IHC  
ICFC



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