

## Monensin Solution (1,000X)

**Catalog No.**

FXP045

**Size**

1ml

**Concentration:**

2.0 mM

**Composition:**

Monensin Solution is supplied as a 1000X working solution in 70% Ethanol. Dilute to 1X in cell culture medium.

**Storage Condition:**

Store the solution -20°C.

**Handling Conditions:**

Monensin is known to be toxic; avoid direct body contact. Ethanol is flammable; keep away from sources of fire.

### DESCRIPTION:

Monensin 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, monensin 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). Monensin Solution is supplied as a 1,000X solution, which should be diluted to 1X in cell culture medium.

### APPLICATIONS REPORTED:

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

### REFERENCES:

1. Smeltz RB. 2007. J. Immunol. 178:4786.
2. Fuse S, et al. 2007. J. Immunol. 178:5227.
3. Durkin ET, et al. 2008. Blood 10:1182. PubMed
4. Durkin ET, et al. 2008. Blood 112:5245. PubMed
5. Liu XS, et al. 2009. J. Immunol. 183:51. PubMed
6. Mattarollo SR, et al. 2010. J. Immunol. 184:1242. PubMed
7. Yang M, et al. 2010. J. Immunol. 184:3321. PubMed
8. Mattarollo SR, et al. 2010. J. Immunol. 184:5663. PubMed
9. Wood MW, et al. 2011. Infect Immun. 79:708. PubMed
10. Janune D, et al. 2011. FEBS Lett. 585:3033. PubMed
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## RELATED PRODUCTS:

Catalog No.	Product Name	Applications
FXP010	刀豆蛋白 A, Concanavalin A (ConA)	FC
FXP011	植物血凝素, Phytohemagglutinin (PHA)	FC
FXP012	佛波酯, 十四烷酰佛波醇乙酸酯 (TPA)	FC
FXP004	钙离子载体 A23187, Calcium Ionophore A23187	FC
FXP006	BFA, Brefeldin A	FC
FXP048	Cell Stimulation Cocktail (500X)	FC
FXP049	Cell Stimulation Cocktail (plus protein transport inhibitors) (500X)	FC
FXP050	Protein Transport Inhibitor Cocktail (500X)	FC