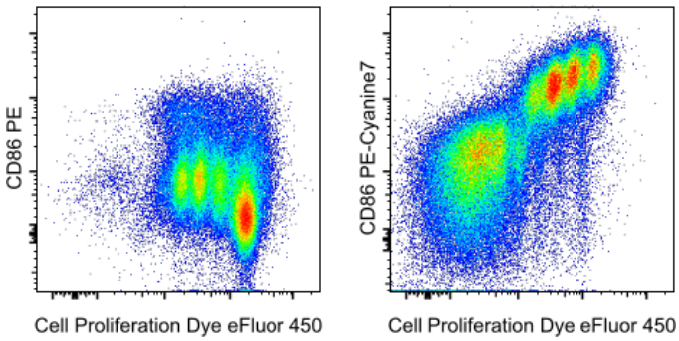
eBioscience™ Concanavalin A (Con A) Solution (500X)

Catalog Number: 00-4978

For Research Use Only. Not for use in diagnostic procedures.



Left: Human peripheral blood mononuclear cells were labeled with 10 uM Cell Proliferation Dye eFluor® 450 (cat. 65-0842) and cultured for 3 days with Concanavalin A (Con A) Solution (500X) at 2 uL per mL of culture medium. Cells were stained with Anti-Human CD86 PE (cat. 12-0869) and Fixable Viability Dye eFluor® 660 (cat. 65-0864). Total singlet-gated, viable cells were used for analysis.

Right: Mouse splenocytes were labeled with 10 uM Cell Proliferation Dye eFluor® 450 (cat. 65-0842) and cultured for 3 days with Concanavalin A (Con A) Solution (500X) at 2 uL per mL of culture medium. Cells were stained with Anti-Mouse CD86 PE-Cyanine7 (cat. 25-0862) and Fixable Viability Dye eFluor® 660 (cat. 65-0864). Total singlet-gated, viable cells were used for analysis.

Product Information

Contents: eBioscience™ Concanavalin A (Con A) Solution (500X)
REF **Catalog Number:** 00-4978
Concentration: 500X (1.25 mg/mL)
Handling Conditions: Use in sterile environment.
Source: *Canavlia ensiformis*

Formulation: Sterile aqueous buffer, no sodium azide
Temperature Limitation: Store at -20°C.
LOT **Batch Code:** Refer to vial
Use By: Refer to vial

Description

The Concanavalin A (Con A) Solution (500X) is a ready-to-use solution of Con A in aqueous buffer. Con A is isolated from the Jack bean, *Canavlia ensiformis*. It is a lectin that binds alpha-D-glucose and alpha-D-mannose moieties found in various glycoproteins, glycolipids, and sugars and is a potent leukocyte mitogen. This reagent is intended for use in *in vitro* activation of human and mouse leukocytes.

Applications Reported

Concanavalin A (Con A) Solution (500X) has been reported for use in in vitro cultures.

Applications Tested

The activity of the Concanavalin A (Con A) Solution (500X) has been tested by proliferation of mouse splenocytes as measured by dilution of Cell Proliferation Dye eFluor® 450. This is a pre-titrated 500X solution and can be diluted to 2 µL per mL of culture medium. This reagent may be further-titrated for optimal performance in the assay of interest.

Under the testing conditions listed above, no change in performance is observed after 20 freeze-thaw cycles. For optimal performance, smaller aliquots may be prepared to minimize the number of freeze-thaw cycles.

References

Dwyer JM, Johnson C. The use of concanavalin A to study the immunoregulation of human T cells. Clin Exp Immunol. 1981 Nov;46(2):237-49.

de Petris S. Concanavalin A receptors, immunoglobulins, and theta antigen of the lymphocyte surface. Interactions with concanavalin A and with Cytoplasmic structures. J Cell Biol. 1975 Apr;65(1):123-46.

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Poretz RD, Goldstein IJ. Protein-carbohydrate interaction. On the mode of bonding of aromatic moieties to concanavalin A, the phytohemagglutinin of the jack bean. Biochem Pharmacol. 1971 Oct;20(10):2727-39.

Related Products

00-4505 eBioscience™ Monensin Solution (1000X)
00-4506 eBioscience™ Brefeldin A Solution (1000X)
00-4970 eBioscience™ Cell Stimulation Cocktail (500X)
00-4975 eBioscience™ Cell Stimulation Cocktail (plus protein transport inhibitors) (500X)
00-4976 eBioscience™ Lipopolysaccharide (LPS) Solution (500X)
00-4977 eBioscience™ Phytohemagglutinin-L (PHA-L) Solution (500X)
00-4980 eBioscience™ Protein Transport Inhibitor Cocktail (500X)
65-0842 eBioscience™ Cell Proliferation Dye eFluor™ 450

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