

## Concanavalin A (Con A) Solution (500X)

## Introduction

Concanavalin A (Con A), derived from Canavalia ensiformis (Concanavalin), is a plant lectin protein (Mw = 104 kDa). At pH  $\ge$  7.0, Con A exists as a homotetrameric structure consisting of four subunits with a molecular weight of 26 kDa. Under acidic conditions (pH 4.5-5.5), Con A dissociates into an activated dimer structure (52 kDa), and acetylation, succinylation, or other derivatives can also produce stable dimer structures. Each subunit binds a Ca2+ and a Mn2+, contains a sugar-binding site, and when the metal ions bind to Con A, it can bind various glycoproteins, glycolipids and  $\alpha$ -D-glucose and a-D-mannose moieties in sugars, which is suitable for carbohydrate research, glycoprotein purification, enzyme tagging, cell membrane research, cell agglutination, cell culture and cell typing studies.

This product is a ready-to-use aqueous buffer (500 X) for Con A, which can be used as a potent leukocytogen-promoting agent as an exogenous lectin. This reagent is intended for in vitro activation of human and mouse leukocytes.

## Protocol

Use of cell stimulation reagents: Dilute the reagents into 1X, e.g., add 2 µL of Con A to 1 mL of medium.

## Note

- 1. The product (500X) is 1.25 mg/mL, ready-to-use reagent, sterile.
- 2. Composition: Sterile aqueous solution without sodium azide.
- 3. Storage: 12 months at -20°C.
- 4. This product is for scientific research use only.

