

Active Native Wheat *Triticum vulgaris* Lectin (WGA), AP-Conjugated

Cat. No. WGA-040W **Lot. No.** (See product label)

SPECIFICATION

Product Overview

Native Wheat *Triticum vulgaris* Lectin (WGA) - AP (Alkaline Phosphatase)
 Blood Group Specificity: Non-specific
 Preferred Sugar Specificity: N-Acetylglucosamine
 Inhibiting or Eluting Sugar: Chitin Hydrolysate or N-Acetylglucosamine w/acid or salt
 Divalent Ions: Ca⁺⁺
 Mitogenic Activity: Yes
 Hazardous Shipping: Non-hazardous
 Carbohydrate Specificity: N-Acetylglucosamine

Species Wheat

Source Wheat

Description

Wheat germ agglutinin (WGA) is a lectin that is affinity purified from *Triticum vulgaris* and non-enzymatically binds to N-acetyl-D-glucosamine and sialic acid residues of glycoproteins and glycolipids. This lectin protects *Triticum vulgaris* from insects, yeast and bacteria. WGA consists of two subunits and has a molecular weight of 36 kDa. It is an acidic protein and has mitogenic activity toward lymphocytes. It agglutinates erythrocytes and most types of malignant cells. Alkaline phosphatase (AP) is conjugated to *Triticum vulgaris* Lectin (WGA) to show the binding of WGA in many applications including Western blotting and ELISA. Alkaline phosphatase is a large protein (140 kDa) that catalyzes the hydrolysis of phosphate groups from a substrate resulting in a colored or fluorescent product. The optimal enzymatic activity of this

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protein is between pH 8 and 10, and its reaction rate remains linear, improving sensitivity over time.

Form	Liquid
Bio-activity	10 µg/ml will agglutinate human erythrocytes nonspecifically.
Purity	High Purity Grade
Stability	Shelf Life: 1 year
Storage	Store frozen at -20 centigrade in amber vials or covered with foil in appropriate aliquot sizes. Avoid freeze thaw cycles. Can be stored at 2-8 centigrade for short term use.
Concentration	1 mg/mL

GENE INFORMATION

Official Symbol	WGA
Synonyms	Triticum vulgaris Lectin; WGA

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