

Triticum vulgare Lectin (WGA) - Separopore® 6B

Cat PL00408

Size 25 mL

Sugar Specificity

(GlcNAc β 4)n

Description

Wheat germ lectin (WGA) is an affinity-purified lectin from wheat that binds to non-enzymes of glycoproteins and glycolipid n-acetyl-D-glucosamine and sialic acid residues. This lectin protects common wheat from insects, yeast and bacteria. WGA consists of two subunits with a molecular weight of 36kda. It is an acidic protein with mitotic activity on lymphocytes. It can agglutinate red blood cells and most malignant cells. Similar to insulin, WGA increases the rate of glucose oxidation in isolated fat cells and can be used to isolate and isolate insulin receptors. A recent addition time study showed that when lectins are incubated with viruses and added to cells during infection, WGA inhibits SARS-CoV-2 infection by inhibiting replication. Data from the same study suggest that the mode of action is the interaction between WGA and the viral envelope, leading to neutralization of the virus. This may occur through highly glycosylated spike proteins. WGA has been used in oral squamous cell carcinoma staining techniques to detect the degree of cell cohesion. It has been shown to inhibit melanoma cell proliferation in a dose-dependent manner. Cytotoxic activity against cancer cells is a characteristic of WGA. Its binding effects have been studied in many cancers, including but not limited to liver cancer, choriocarcinoma, osteosarcoma, and some pancreatic cancers.

Abbreviation

WGA

Material Source

Wheat germ

Conjugate

Separopore® 6B

Purity

High Purity Grade

Shelf Life

1 year

Blood Group Specificity

Non-specific

Sugar Specificity

(GlcNAc β 4)n

Mitogenic Activity

No

Format

Liquid

Storage

2-8°C

Hazardous Shipping

Non-hazardous

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