# Artocarpus integrifolia Lectin (AIA) - Cy5



Cat PL00105

Size 1 mg

## **Sugar Specificity**

Galβ3GalNAc

## **Description**

Jacalin agglutinin (AIA) is a tetramer double-stranded structure consisting of four identical propolymers with an isoelectric pH of 7.8. The lectin is specific to blood type O (+SA) and t. Jacalin is considered a galactose-specific lectin that can be eluted with galactose or glycodisaccharide. Jacalin's post-translational proteolytic modification gives lectin a new carbohydrate binding site involving the N end of the α-chain. The structure of this protein explains its carbohydrate-binding specificity to the t antigen disaccharide gal beta 1,3 galnac. Effective inhibitors of jacalin include D-galactose, β-Met-Gal, and 2-deoxy-α-D-galactose. When Cy5 binds to Artocarpus integrifolia (Jacalin) Lectin (AIA), the binding pattern of this lectin can be shown by cell imaging and flow cytometry. The excitation wavelength required for Cy5 fluorescence is high enough to avoid overlapping with most other fluorescent dyes, making it useful for double-labeling experiments. Because of this high excitation, the autofluorescent background of biological specimens is usually less.

#### **Abbreviation**

AIA

#### **Material Source**

Jacalin

### Conjugate

Cyanine 5 (Cy5)

#### Concentration

1 mg/mL

#### **Shelf Life**

1 year

## **Blood Group Specificity**

Non-specific

## **Sugar Specificity**

Galß3GalNAc

# **Inhibiting or Eluting Sugar**

Galactose or Melibiose

#### **Divalent Ions**

None Required

## **Mitogenic Activity**

Yes

#### **Format**

Liquid

#### Storage

2-8°C

#### FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY

Address: SUITE 209, 17 Ramsey Road, Shirley, NY 11967 Tel: 1-631-637-0420

# Artocarpus integrifolia Lectin (AIA) - Cy5



Cat PL00105

Size 1 mg

### **Excitation**

650 nm

#### **Emission**

670 nm

#### **Fluorescence**

Red

## **Hazardous Shipping**

Non-hazardous

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