Musa acuminata lectin – BanLec

Product description

*Musa acuminata* lectin (BanLec) is isolated from banana pulp and purified by affinity column chromatography on a Mannose-Sepharose 6B-CL gel. This Jacalin-type lectin is a dimeric lectin composed of two identical subunits of 15 kDa (1).

BanLec shows affinity towards (2):
- terminal α-D-mannosyl/glycosyl units
- internal α-1,3-mannosyl/glucosyl units
- terminal β-1,3-glucosyl units.

The recognition of both internal 3-O-mannosyl/glucosyl residues and the reducing terminal 3-O-mannosyl/glucosyl unit of oligosaccharides make BanLec unique in its carbohydrate binding properties (3).

BanLec agglutinates rabbit erythrocytes (4). Moreover, BanLec has been demonstrated to be a powerful murine T-cell mitogen and also has been shown to stimulate human T-cell proliferation (1).

Ordering informations

<table>
<thead>
<tr>
<th>Reference</th>
<th>Name</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1889-2</td>
<td>BanLec lectin</td>
<td>2 mg</td>
</tr>
<tr>
<td>L1889-5</td>
<td>BanLec lectin</td>
<td>5 mg</td>
</tr>
</tbody>
</table>

Applications

Validated in GLYcoPROFILE
Agglutination studies
Stimulation of cell proliferation
Binding/Recognition studies based on specific properties of this lectin

Features

Mannose binding lectin

Product specifications

**Appearance:** in solution
**Source:** Banana pulp
**Molecular weight:** 30 kDa
**Structure:** Homodimer of 15 kDa.

**Carbohydrate specificity:**
- terminal α-D-mannosyl/glycosyl units
- internal α-1,3-mannosyl/glucosyl units
- terminal β-1,3-glucosyl units

**Number of carbohydrate recognition sites:** 4

**Inhibitory carbohydrate:** Mannose, Glucose

**Activity:** Agglutinates animals erythrocytes.

**Buffer:** PBS 150 mM with MgCl$_2$ (0.5 mM) et CaCl$_2$ (1 mM)

**Microorganisms:** < 100 CFU/g

**Protein content:** > 99 %

**Identity & Purity:** SDS-PAGE, one single band at 15 kDa.

**Shelf life:** Two years when stored at -20 °C.

**Shipping and storage:**
The product is shipped at -20 °C however for over-the-day transport it may be shipped at ambient temperature. The solution is stable for two years from production date when stored below -20 °C.

For Research Use Only.

References


