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|------------------|--|
| Product name:    | <b>Concanavalin A, <i>Canavalia ensiformis</i> (Jack bean) Lectin.</b> |
| Production date: | 2009-07  |
| Date of release: | 2014-05-15; Retested 2016-01   |
| Expiry:          | 2018-07  |
| Form:            | Lyophilized  |

| Analysis                                 | Specification  | Result                                      |
|--|--|---|
| Appearance                               | White powder or flocculate by visual inspection resulting in a clear solution.   | Fulfills requirement                        |
| Solubility                               | Dissolves in PBS buffer pH 7.4 within 5 minutes (1mg/ml).  | Fulfills requirement                        |
| Assay (%)                                | > 90 % by $A_{280nm}$ ( $\epsilon_{1mg/ml} = 1,14$ )   | 98%, fulfills requirement                   |
| Electrophoresis                          | 4 major bands in SDS-electrophoresis, comparable to reference sample.  | Fulfills requirement, see appendix 1.       |
| Bacterial burden                         | Less than $10^2$ CFU per 1 g of solid substance.   | <13 CFU/g, fulfills requirement             |
| Activity<br>Haemagglutination/inhibition | Agglutinates a 2% suspension of human erythrocytes (type 0) at $\leq 40 \mu\text{g/ml}$ . The agglutination activity is inhibited by 100mM D-glucose | 10 $\mu\text{g/ml}$ . Fulfills requirement. |

|                            |
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| Appendixes:<br>1. SDS-PAGE |
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The above material has met all quality specifications and has been reviewed by a quality representative.

  
 Quality Assurance, Erik Silfverplatz

2016-02-12

Date

## Appendix 1

### SDS PAGE analysis Con A lot 152701 - 220303

Electrophoresis with Pharmacia Phast system (Amersham Biosciences)

#### Material

Phast gel gradient 8 – 25  
Phast gel SDS buffer strips

#### Method

The reference protein (freeze dried) was dissolved at 2 mg/ml in loading buffer (10 mM TRIS/HCL, 1 mM EDTA, 2.5 % SDS, 1 % b-mercaptoethanol).

Con A lot 181716 in solution was first separated on a PD10 column for buffer exchange to water and then dissolved 1:1 in loading buffer.

LMW marker was from, LMW SDS calibration kit for SDS electrophoresis (GE Healthcare).

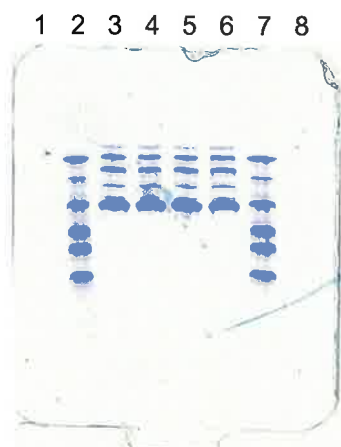
MW of proteins included in LMW (14 000 Da - 97 000 Da) marker:

|                       |        |
|-----------------------|--------|
| Phosphorylase b       | 97 000 |
| Albumin               | 66 000 |
| Ovalbumin             | 45 000 |
| Carbonic anhydrase    | 30 000 |
| Trypsin inhibitor     | 20 100 |
| $\alpha$ -Lactalbumin | 14 400 |

The samples were boiled for 5 min. and approx. 0.5  $\mu$ l was applied on Phast gel (gradient 8 – 25).  
Program; 300v, 7.5 mA, 2.0 W, 80 Vh.

The gels were stained with Coomassie blue for 30 min and then destained.

#### Result



**Lane 2** LMW standard  
**Lane 3, 4** Con A lot 152701 - 220303  
**Lane 5, 6** Con A lot 161701 (reference)  
**Lane 7** LMW standard

Analysis performed by : Doreen Heinrich  
Doreen Heinrich, 2016-01-19