



Product name:	Concanavalin A, <i>Canavalia ensiformis</i> (Jack bean) Lectin.
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 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.

Appendixes: 1. SDS-PAGE

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).

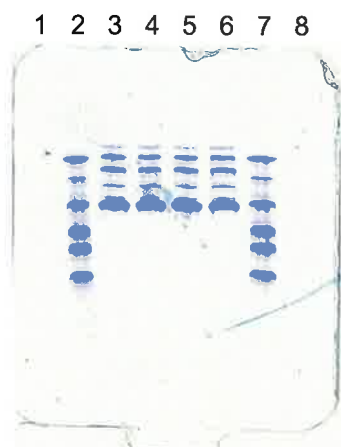
MW of proteins included in LMW (14 000 Da - 97 000 Da) marker:

Phosphorylase b	97 000
Albumin	66 000
Ovalbumin	45 000
Carbonic anhydrase	30 000
Trypsin inhibitor	20 100
α -Lactalbumin	14 400

The samples were boiled for 5 min. and approx. 0.5 μ 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