

Art no: 05-0106

Lot no: 251709

CERTIFICATE OF ANALYSIS



Product name:	Concanavalin A, <i>Canavalia ensiformis</i> (Jack bean) Lectin.
Production date:	2019-05
Date of release:	2019-06-04
Expiry:	2024-05
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} ($\epsilon_{1mg/ml} = 1,14$)	99%, fulfills requirement
Electrophoresis	4 major bands in SDS-electrophoresis, comparable to reference sample.	Fulfills requirement, see appendix 1.
Activity Haemagglutination/inhibition	Agglutinates human erythrocytes (2% blood solution) when lectin concentration is $\leq 40 \mu\text{g/ml}$ in 0.9 % NaCl. The agglutination activity is inhibited by 100 mM D-glucose, at a lectin concentration of $\geq 300 \mu\text{g/ml}$.	Agglutination at $20 \mu\text{g/ml}$; fulfills requirement, see appendix 2.
Bacterial burden	Less than 10^2 CFU per 1 g of solid substance.	Fulfills requirement

Appendixes: 1. SDS-PAGE 2. Activity, Hemagglutination control.
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The above material has met all quality specifications and has been reviewed by a quality representative.


Quality Assurance, Malin Mattson

2019-06-04
Date

Bilaga 1, tillhör M-00230

SDS PAGE analysis Con A lot 251709

Electrophoresis with Pharmacia Phast system (Amersham Biosciences)

Material

Phast gel gradient 8 – 25
Phast gel SDS buffer strips

Method

The protein was dissolved at 2 mg/ml in loading buffer (10 mM TRIS/HCL, 1 mM EDTA, 2.5 % SDS, 50 mM DTT)

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

1 2 3 4 5 6 7 8



Lane 1, 7, 8 Empty
Lane 2 LMW standard
Lane 3, 5 Con A lot 251709
Lane 4, 6 Con A lot 152701 (reference)

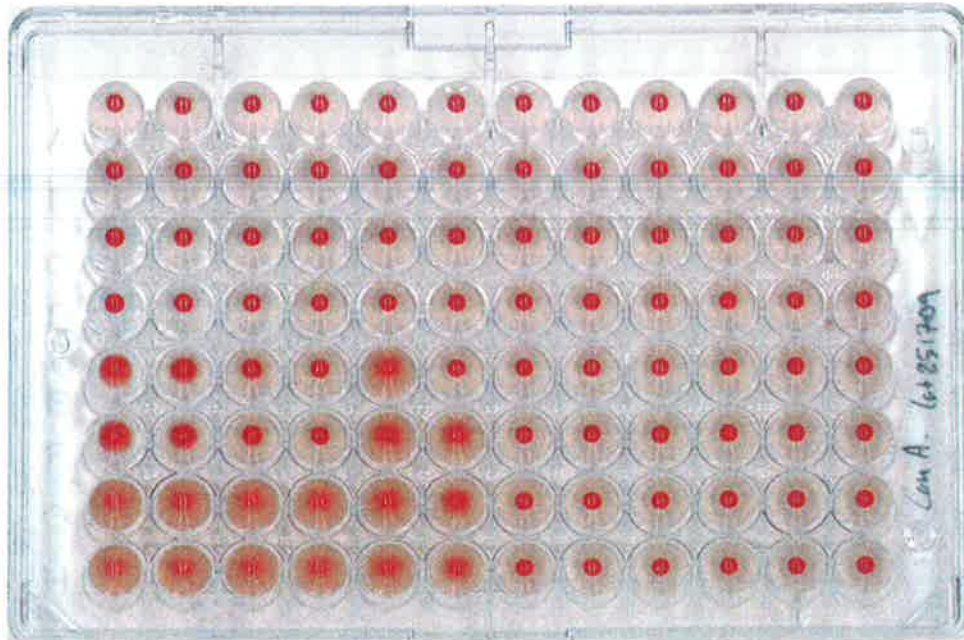
Analysis performed by: 
Tyra Hultgren, 2019-05-21



Bitaga L, Althar M-00020 2019-05-16 (TH)

**Haemagglutination (human blood, group 0)
Concanavalin A (Con A), lot 251709**

Col	1	2	3	4	5	6	7	8	9	10	11	12
Conc	333	167	83	42	21	10	5.2	2.6	1.3	0.6	0.3	0.16 $\mu\text{g/mL}$



Row A,B Blank
Row C-D 100 mM D-Glucose
Row E-F 10 mM D-Glucose
Row G-H NaCl, agglutination control

5E, 5F and 6F are missing D-Glucose due to pipetting mistake.

Date: 2019-05-16

Signature: TH