Art no: 05-0115

Lot no: 251103

CERTIFICATE OF ANALYSIS



Product name: PHA-P Lectin

Production date:

2019-04

Date of release:

2019-04-26

Stability:

2024-04

Source:

Phaseolus Vulgaris beans (Red Kidney Beans)

Form:

Lyophilized

Storage:

-18 °C (may be shipped at ambient temp)

Analysis	Specification	Result
Appearence	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.	Fulfills requirement
Assay (%)	> 75 % by OD ₂₈₀ nm (ε 1mg/ml = 0,96) in PBS pH 7.4 after filtration through 0.2 μm acetate membrane.	91.59 %, fulfills requirement
Electrophoresis	One major band 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.	Fulfills requirement
Haemagglutination	Agglutinates human blood group 0 at a concentration ≤ 4 µg/mL	2.0 µg/mL, fulfills requirement, see appendix 2.

Λ		2	ixes:	
Αľ	mei	HO.	ixes:	

- 1. SDS-PAGE
- 2. Haemagglutination

The above material has met all quality specifications and has been reviewed by a quality representative.

Quality Assurance, Malin Mattson

2019-04-26

Date



Bilaga 1, tillhör M-00230 SDS PAGE, analysis of PHA-P lot 251103

Electrophoresis with Pharmacia Phastsystem (Amersham Biosciences)

Material

Phast gel gradient 8 – 25 Phast gel SDS buffer strips

Method

The proteins were dissolved to 2 mg/ml 1:1 in PBS and loading buffer (10.9 mM TRIS/HCL, 1.1 mM EDTA, 2.7 % 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:

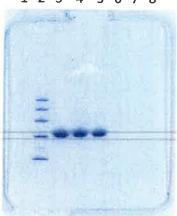
Phosphorylase b 97 000 Albumin 66 000 Ovalbumin 45 000 Carbonic anhydrase 30 000 Trypsin inhibitor 20 100 α-Lactalbumin 14 400

The samples were boiled for 5 min. and approx. 1 µl 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, 6, 7, 8 Empty

Lane 2

LMW

Lane 3, 4

PHA-P lot 251103

Lane 5

PHA-P lot 233307 (reference)

Analysis performed by

Tyra Hultgren, 2019-04-09



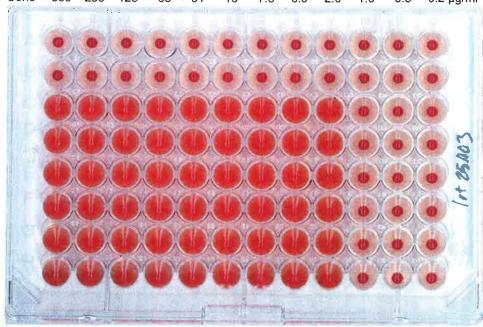
Bilaga 2, tillhör M-00030

Haemagglutination (human blood group 0)

Lectin from Phaseolus vulgaris (red kidney bean),

Phytohemagglutinin (PHA)-P lot 251103

Column 1 2 3 4 5 6 7 8 9 10 11 12 Conc 500 250 125 63 31 16 7.8 3.9 2.0 1.0 0.5 0.2 μ g/ml



Row A,B Row C-H Blank PHA-P lot 251103

Date: 2019-04-11

Signature:_