



Intertek

Product name:	Pisum Sativum Lectin (PSA)	
Production date:	2017-10	(Retested 2023-07-28*)
Date of release:	2023-09-04	
Stability:	2028-07	
Source:	<i>Pisum Sativum</i> (Yellow peas)	
Form:	Lyophilized	
Storage:	-20°C	

Analysis	Specification	Result
Appearance	White to cream colored powder or flocculate	Fulfills requirement
Assay (%)	≥ 85% (A ₂₈₀), ε 1mg/ml = 1.6	85.4%, fulfills requirement
Electrophoresis	Two major bands in SDS-electrophoresis, comparable to reference sample.	Fulfills requirement, see appendix 1.
Activity/haemagglutination*	Agglutinates a 2% suspension of human blood group 0 erythrocytes at lectin conc. ≤ 10 µg/ml. The agglutination is inhibited by 60 mM methylmannoside (end conc. 20 mM) at a titer minimum 4 steps lower than that of control. Control must have a titer of minimum 32.	5.2 µg/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, Sebastian Määttä

2023-09-04

Date

SDS PAGE, analysis of PSA lot 233425

Electrophoresis with Pharmacia Phastsystem (Amersham Biosciencis).

Material

Phast gel gradient 8 – 25
Phast gel SDS buffer strips

Method

The protein was diluted 1:1 in loading buffer (10 mM TRIS/HCL, 1 mM EDTA, 2.5 % SDS, 50mM 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:

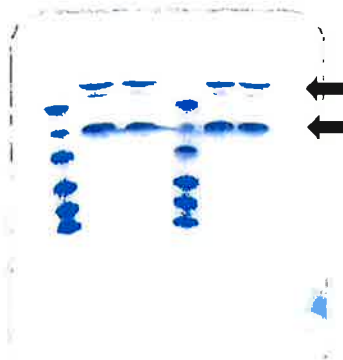
Phosphorylase b	97 000
Albumin	66 000
Ovalbumin	45 000
Carbonic anhydrase	30 000
Trypsin inhibitor	20 100
α -Lactalbumin	14 400

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. –

Lane 2. LMW mol marker

Lane 3. PSA lot 233425 2.0 mg/ml

Lane 4. PSA lot 233425 2.0 mg/ml

Lane 5. LMW mol marker

Lane 6. PSA lot 181507 2.0 mg/ml

Lane 7. PSA lot 181507 2.0 mg/ml

Lane 8. –

Analysis performed by


Doreen Heinrich, 2017-11-09