



Sample Characterization of P7

Winter Seminar 2016 at MFB

PAGE Analysis



PAGE Analysis

Date: November. 18, 2016

Sample Received: November. 18, 2016

Protein Name: 冬の学校 P7

性状確認

大阪大学 中川先生

Sample purified by:

PAGE Type: SDS-PAGE under the reduced condition

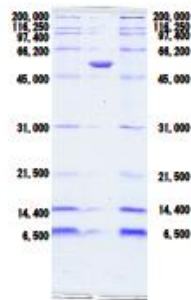
Native-PAGE under the non-reduced condition

Native-PAGE under the non-reduced and acidic condition

Gel Concentration: SDS-PAGE 15.0%

Native-PAGE 12.0%

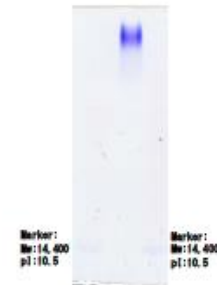
Native-PAGE 12.0%(acidic condition)



SDS- PAGE under the reduced condition



Native-PAGE under the non-reduced condition



Native-PAGE under the non-reduced and acidic condition

DLS Analysis



Protein Characterization Report

Sample Details

Sample Name: 161117 P7(161117cv).dts 3
 File Name: 161117 P7(161117cv).dts
 Record Number: 3
 Meas Date & Time: 2016年11月17日 15:00:18

Temperature (°C): 20.0
 Solvent: Water
 Solvent Dispersant RI: 1.330
 Solvent Viscosity (cP): 1.0031

Cumulant Results

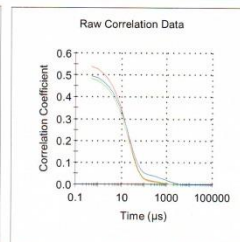
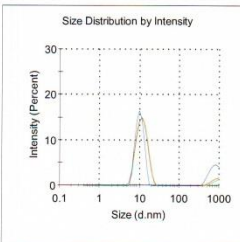
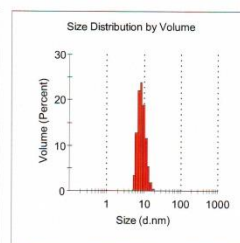
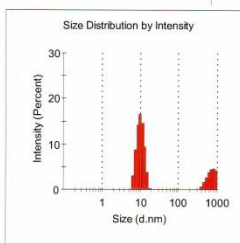
Count Rate (kcps): 472.3
 Z-Average (d.nm): **14.35**
 Polydispersity: 0.452
 Polydispersity (d.nm): 9.647
 %Polydispersity: **67.2**
 Estimated MW (kDa): **339**
 Polydispersity: *Polydisperse*

Intensity Distribution Results

	%Int	Mean (nm)	Mode (nm)	SD (nm)	%Pd	MW (kDa)*
Peak 1:	70.1	10.46	10.10	2.374	22.7	162
Peak 2:	29.9	872.4	825.0	307.8	35.3	5.00e6
Peak 3:	0.0	0.000	0.000	0.000	0	0.00

Mass Distribution Results

	%Mass	Mean (nm)	Mode (nm)	SD (nm)	%Pd	MW (kDa)*
Peak 1:	99.9	9.082	8.721	2.214	24.4	116
Peak 2:	0.1	1022	955.4	359.5	35.2	7.31e6
Peak 3:	0.0	0.000	0.000	0.000	0	0.00



*The molecular weight reported here is only an estimate, calculated using an empirical mass vs. size calibration curve.

*The estimated concentration is calculated from the size distribution measured by DLS and extrapolated from the total intensity compared to a standard sample of known size, concentration, and refractive index. If the current sample is non-spherical or the refractive index is incorrect the value of the predicted concentration may be in error.

Malvern Instruments Ltd
 www.malvern.com

Detalier Ver. 1.02
 Serial Number: 86100409



MARUWA Foods and Biosciences Inc.
 170-1, Tsutsui-cho, Yamatohoriyama,
 Nara, JAPAN, 639-0123

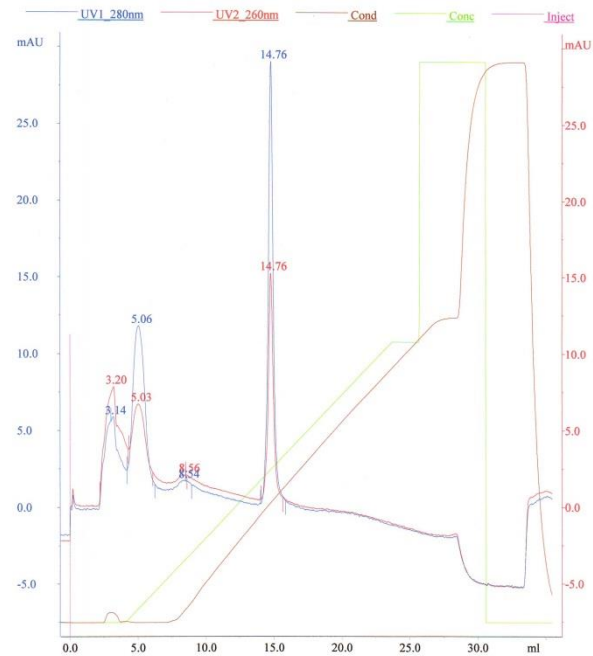
File name: 161117 P7(161117cv).dts
 Record Number: 3
 17 11 2016 15:00:14

Chromatography Analysis



P7(161117rev) 0.4mg/ml 100ul SP0-50%B
UNICORN 5.31 (Build 743)
11/18/2016 10:54:29 AM Tokyo Standard Time
Result file: c:_default\Temp\pakikom D\Nakagawa\P7(161117rev) 04mg/ml 100ul SP050B001
Method file: C:_default\Standard\SPSP

P7(161117rev) 0.4mg/ml 100ul SP0-50%B



MARUWA Foods and Biosciences, Inc AKTA1.

1 (3)

1. Ni-NTA
2. His remove
3. Ni-NTA
4. Cation Exchange
5. Gel filtration