



Sample Characterization of

U2AF23-U2AF59

M2LC3

Winter Seminar 2016 at MFB

PAGE Analysis



PAGE Analysis

Date: November. 16, 2016

Sample Received: November. 16, 2016

Protein Name: 冬の学校 U2AF23-U2AF59

性状確認

神奈川科学技術センター 朴先生

Sample purified by:

PAGE Type: SDS-PAGE under the reduced condition

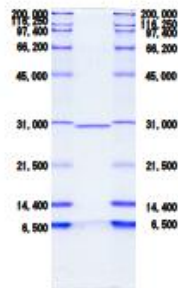
Native-PAGE under the non-reduced condition

Native-PAGE under the non-reduced and acidic condition

Gel Concentration: SDS-PAGE 15.0%

Native-PAGE 12.0%

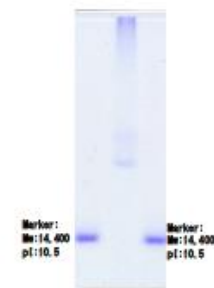
Native-PAGE 12.0%(acidic condition)



SDS- PAGE under the reduced condition



Native-PAGE under the non-reduced condition



Native-PAGE under the non-reduced and acidic condition

PAGE Analysis



PAGE Analysis

Date: November. 21, 2016

Sample Received: November. 21, 2016

Protein Name: M2LC3

1: 濃い (UV)

2: 薄い

冬の学校

神奈川県科学技術アカデミー 朴先生

性状確認

Sample purified by:

PAGE Type: SDS-PAGE under the reduced condition

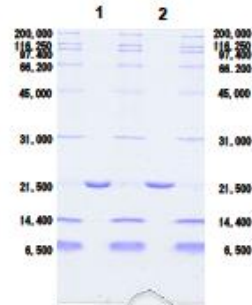
Native-PAGE under the non-reduced condition

Native-PAGE under the non-reduced and acidic condition

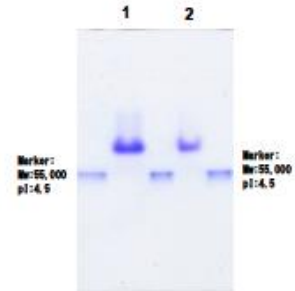
Gel Concentration: SDS-PAGE 15.0%

Native-PAGE 12.0%

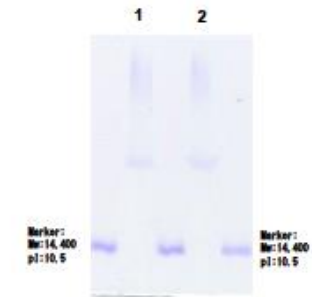
Native-PAGE 12.0%(acidic condition)



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: 161116 U2AF23-U2AF59(161116rcv...
 File Name: 161116 U2AF23-U2AF59(16...
 Record Number: 3
 Meas Date & Time: 2016年11月16日 11:30:01

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

Cumulant Results

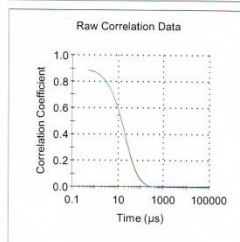
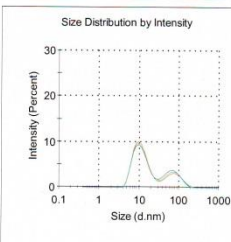
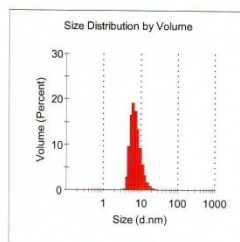
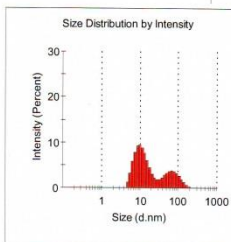
Count Rate (kcps): 492.6
 Z-Average (d.nm): **13.87**
 Polydispersity: 0.370
 Polydispersity (d.nm): 8.440
 %Polydispersity: **60.9**
 Estimated MW (kDa): **313**
 Polydispersity: *Polydisperse*

Intensity Distribution Results

Peak	%Int	Mean (nm)	Mode (nm)	SD (nm)	%Pd	MW (kDa)*
Peak 1:	68.4	11.95	10.10	5.292	44.3	220
Peak 2:	31.6	71.49	68.06	32.79	45.9	1.4564
Peak 3:	0.0	0.000	0.000	0.000	0	0.00

Mass Distribution Results

Peak	%Mass	Mean (nm)	Mode (nm)	SD (nm)	%Pd	MW (kDa)*
Peak 1:	100.0	7.895	6.503	3.575	45.3	83.6
Peak 2:	0.0	0.000	0.000	0.000	0	0.00
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.



MARUWA Foods and Biosciences Inc.
 170-1, Tsutsui-cho, Yamatsugyo-shi,
 Nara, JAPAN, 639-1123

File name: 161116 U2AF23-U2AF59(161116rcv).dls
 Record Number: 3
 16 11 2016 11:30:11

Malvern Instruments Ltd
 www.malvern.com

Detector Ver: 1.01
 Serial Number: MAL080495

Protein Characterization Report

Sample Details

Sample Name: 161121 M2LC3(161121rcv) 3
 File Name: 161121 M2LC3(161121rcv).dls
 Record Number: 3
 Meas Date & Time: 2016年11月21日 12:12:25

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

Cumulant Results

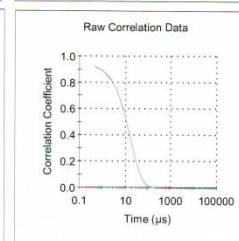
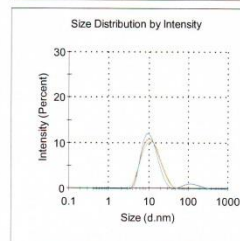
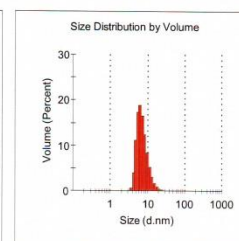
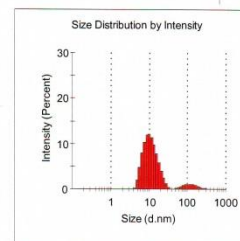
Count Rate (kcps): 197.1
 Z-Average (d.nm): **10.74**
 Polydispersity: 0.216
 Polydispersity (d.nm): 4.992
 %Polydispersity: **46.5**
 Estimated MW (kDa): **172**
 Polydispersity: *Polydisperse*

Intensity Distribution Results

Peak	%Int	Mean (nm)	Mode (nm)	SD (nm)	%Pd	MW (kDa)*
Peak 1:	91.9	11.70	10.10	5.224	44.6	210
Peak 2:	8.1	128.9	105.7	53.94	41.9	5.76e4
Peak 3:	0.0	0.000	0.000	0.000	0	0.00

Mass Distribution Results

Peak	%Mass	Mean (nm)	Mode (nm)	SD (nm)	%Pd	MW (kDa)*
Peak 1:	100.0	7.595	6.503	2.845	37.5	76.4
Peak 2:	0.0	0.000	0.000	0.000	0	0.00
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.



MARUWA Foods and Biosciences Inc.
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 Nara, JAPAN, 639-1123

File name: 161121 M2LC3(161121rcv).dls
 Record Number: 3
 21 11 2016 12:12:04

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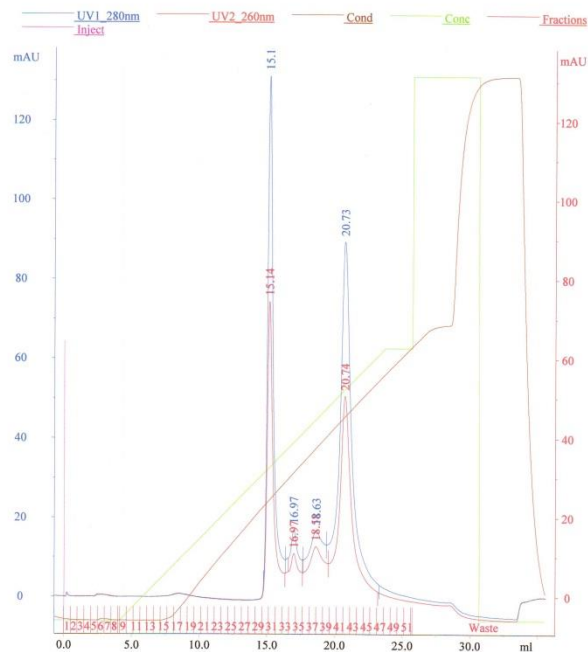
Detector Ver: 1.01
 Serial Number: MAL080495

Chromatography Analysis



U2AF23-U2AF59(161116rcv Prpaku) 24mg/ml 10ul SP0-50%B
 UNICORN 5.31 (Build 743)
 11/18/2016 01:28:44 PM Tokyo Standard Time
 Result file: c:_default\YokohamaCity Univ DrBoku\U2AF23 U2AF59(161116rcv)\U2AF23U2AF59(161116rcv Prpaku) 24mgml 10ul SP050B(1479443324)001
 Method file: C:_default\Standard\SPSP Frac

U2AF23-U2AF59(161116rcv Prpaku) 24mg/ml 10ul SP0-50%B

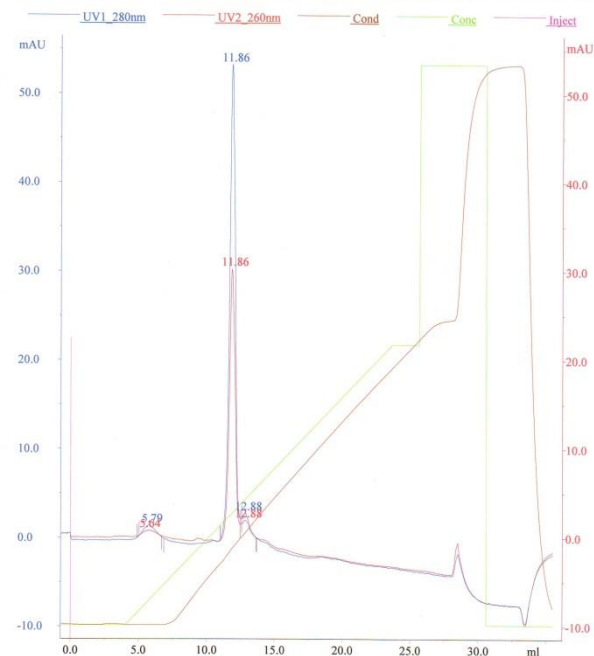


MARUWA Foods and Biosciences, Inc. AKTA1
 1 (3)

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

M2LC3(161121rcv) A280=4.72 10ul SuperQ0-50%B
 UNICORN 5.31 (Build 743)
 11/22/2016 01:30:56 PM Tokyo Standard Time
 Result file: c:_default\YokohamaCity Univ DrBoku\M2LC3(161121rcv)\M2LC3(161121rcv) A280472 10ul SuperQ050B001
 Method file: C:_default\Standard\SuperQ\SuperQ

M2LC3(161121rcv) A280=4.72 10ul SuperQ0-50%B



MARUWA Foods and Biosciences, Inc. AKTA1.
 1 (3)

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