

Isolation and Characterization of Intact Phycobilisome in Cyanobacteria

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Materials

Name	Company	Catalog Number	Comments
0.1 mm glass beads	BioSpec	11079101	for PBS extraction
13 mL centrifugation tube	Hitachi	13PA	ultracentrifugation
40 mL centrifugation tube	Hitachi	40PA	ultracentrifugation
Acetic acid	Merck	8.1875.2500	for Coomassie Blue staining
B-HEPES medium			A modified cyanobacterial medium from BG-11 medium
Brilliant Blue R-250	Sigma	B-0149	for Coomassie Blue staining
Bromophenol blue	Wako pure chemical industries	2-291	protein loading buffer
Electronic balance	Radwag	WLC 2/A2/C/2	for the wet weight measurement of cell pellets
Fluorescence spectrophotometer	Hitachi	F-7000	Spectrophotometer
Glycerol	BioShop	Gly001.500	protein loading buffer
High-Speed refrigerated centrifuge	Hitachi	CR22N	for buffer exchange
<i>Leptolyngbya</i> sp. JSC-1			from Dr. Donald A. Bryant at Pennsylvania State University, USA.
Low temperature measurement accessory	Hitachi	5J0-0112	The accessory includes a transparent Dewar container for 77K fluorescence spectroscopy.
Methanol	Merck	1.07018,2511	for Coomassie Blue staining
Microcentrifuge	Thermo Fisher	Pico 21	for PBS extraction
Mini-Beadbeater-16	BioSpec	Model 607	for PBS extraction
Potassium phosphate dibasic	PanReac AppliChem	121512.121	for PBS extraction
Potassium phosphate monobasic	PanReac AppliChem	141509.121	for PBS extraction
Screw cap vial	BioSpec	10832	for PBS extraction
SmartView Pro Imager	Major Science	UVCI-2300	for Znc staining signal detection
Sodium dodecyl sulfate	Zymeset	BSD101	protein loading buffer
Sucrose	Zymeset	BSU101	for PBS isolation
<i>Synechocystis</i> sp. PCC 6803			glucose-tolerant strain from Dr. Chu, Hsiu-An at Academia Sinica, Taiwan
Tris	BioShop	TRS 011.1	protein loading buffer

Triton X-100	BioShop	TRX 506.500	for PBS extraction
Ultra 10 K membrane centrifugal filter	Millipore	UFC901024	for buffer exchange
Ultra 3 K membrane centrifugal filter	Millipore	UFC500324	for buffer exchange
Ultracentrifuge	Hitachi	CP80WX	ultracentrifugation
UV/Vis spectrophotometer	Agilent	Cary 60	Spectrophotometer
Zinc sulfate	PanReac AppliChem	131787.121	for Znic staining
β -Mercaptoethanol	BioBasic	MB0338	protein loading buffer