

Materials List for:

# Gene-targeted Random Mutagenesis to Select Heterochromatin-destabilizing Proteasome Mutants in Fission Yeast

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## Materials

Name	Company	Catalog Number	Comments
<b>1. Media</b>			
Glucose	Sigma-Aldrich	G8270-10KG	
Yeast extract	BD Biosciences	212720	
L-Leucine	JUNSEI	87070-0310	
Adenine sulfate	ACR	16363-0250	
Uracil	Sigma-Aldrich	U0750	
L-Histidine	Sigma-Aldrich	H8125	
KH <sub>2</sub> PO <sub>4</sub>	Sigma-Aldrich	1.05108.0050	
NaCl	JUNSEI	19015-0350	
MgSO <sub>4</sub> ·7H <sub>2</sub> O	Sigma-Aldrich	63140	
CaCl <sub>2</sub>	Sigma-Aldrich	12095	
Potassium phthalate	Sigma-Aldrich	P6758-500g	
Inositol	Sigma-Aldrich	I7508-50G	
Biotin	Sigma-Aldrich	B4501-100MG	
Boric Acid	Sigma-Aldrich	B6768-1KG	
MnSO <sub>4</sub>	Sigma-Aldrich	M7634-500G	
ZnSO <sub>4</sub> ·7H <sub>2</sub> O	JUNSEI	83060-031	
FeCl <sub>2</sub> ·4H <sub>2</sub> O	KANTO	CB8943686	
Sodium molybdate dihydrate	YAKURI	31621	
KI	JUNSEI	80090-0301	
CuSO <sub>4</sub> ·5H <sub>2</sub> O	YAKURI	09605	
D-myo-inositol	MP biomedical	102052	
Pantothenate	YAKURI	26003	
Nicotinic Acid	Sigma-Aldrich	N4126-500G	
(NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub>	Sigma-Aldrich	A4418-100G	
Agarose	Biobasic	D0012	
G418, geneticin	LPS	G41805	
<b>2. Enzyme reactions</b>			
PfuUltra II Fusion HS DNA Polymerase	Aglient	600380	For site-directed mutagenesis
GeneMorphII Random mutagenesis Kit	Aglient	200500	For error-prone PCR
Phusion High-Fidelity DNA Polymerase	Thermo Fisher	F-530L	For fusion PCR

Ex Taq DNA Polymerase	Takara	RR001b	For general PCR
BamH1	New England BioLabs	R0136S	
Xho1	New England BioLabs	R0146S	
Dpn1	New England BioLabs	R0176S	
<b>3. Equipment</b>			
Velveteen square, black	VWR	89033-116	For replica
Replica-plating tool	VWR	25395-380	For replica
MicroPulser Electroporator	Biorad	1652100	For fission yeast transformation
Electroporation Cuvettes, 0.2 cm gap	Biorad	1652086	For fission yeast transformation
Thermal Cycler	Bioer	BYQ6078	For fusion PCR ramp reaction