

Materials List for:

In Vitro Enzyme Measurement to Test Pharmacological Chaperone Responsiveness in Fabry and Pompe Disease

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Materials

Name	Company	Catalog Number	Comments
Material			
QuikChange II XL Site-Directed Mutagenesis Kit	Stratagene, La Jolla, CA, USA	#200522	
Primer GLA[R301Q]-fwr: 5'-CTA ATG ACC TCC AAC ACA TCA GCC C-3'	MWG Eurofins Operon, Ebersberg, Germany	n.a.	
Primer GLA[R301Q]-rev: 5'-GGG CTG ATG TGT TGG AGG TCA TTA G-3'	MWG Eurofins Operon, Ebersberg, Germany	n.a.	
Primer GLA[A156V]-fwr: 5'-CTA CGA CAT TGA TGT CCA GAC CTT TGC TG-3'	MWG Eurofins Operon, Ebersberg, Germany	n.a.	
Primer GLA[A156V]-rev: 5'-CAG CAA AGG TCT GGA CAT CAA TGT CGT AG-3'	MWG Eurofins Operon, Ebersberg, Germany	n.a.	
Primer GLA[A156V]-fwr: 5'-GGA AAT AAA ACC TGC ACA GGC TTC CCT GGG A-3'	MWG Eurofins Operon, Ebersberg, Germany	n.a.	
Primer GLA[A143T]-rev: 5'-TCC CAG GGA AGC CTG TGC AGG TTT TAT TTC C-3'	MWG Eurofins Operon, Ebersberg, Germany	n.a.	
Primer GAA[F455Y]-fwr: 5'-CTG CCG GGA GCT TCA GGC CCT ACG A-3'	MWG Eurofins Operon, Ebersberg, Germany	n.a.	
Primer GAA[F455Y]-rev: 5'-TCG TAG GGC CTG AAG CTC CCG GCA G-3'	MWG Eurofins Operon, Ebersberg, Germany	n.a.	
Primer GAA[P545L]-fwr: 5'-CAC CCT ACG TGC TTG GGG TGG TTG G-3'	MWG Eurofins Operon, Ebersberg, Germany	n.a.	
Primer GAA[P545L]-rev: 5'-CCA ACC ACC CCA AGC ACG TAG GGT G-3'	MWG Eurofins Operon, Ebersberg, Germany	n.a.	
Primer GAA[L552P]-fwr: 5'-TTG GGG GGA CCC CCC AGG CGG CCA C-3'	MWG Eurofins Operon, Ebersberg, Germany	n.a.	
Primer GAA[P545L]-rev: 5'-GTG GCC GCC TGG GGG GTC CCC CCA A-3'	MWG Eurofins Operon, Ebersberg, Germany	n.a.	
Primer T7: 5'-TAA TAC GAC TCA CTA TAG GG-3'	MWG Eurofins Operon, Ebersberg, Germany	n.a.	

Primer BGHrev: 5'-TAG AAG GCA CAG TCG AGG-3'	MWG Eurofins Operon, Ebersberg, Germany	n.a.	
Tryptone	Carl Roth, Karlsruhe, Germany	8952.1	
Yeast Extract	Merck, Darmstadt, Germany	103,753	
Sodium chloride	Merck, Darmstadt, Germany	1,064,041,000	
Potassium chloride	Merck, Darmstadt, Germany	1,049,360,500	
MgCl ₂ x 6H ₂ O	Merck, Darmstadt, Germany	1,058,330,250	
D (+)-Glucose monohydrate	Merck, Darmstadt, Germany	1,083,422,500	
Sodium Hydroxide	Merck, Darmstadt, Germany	1,064,980,500	
Glycine	Carl Roth, Karlsruhe, Germany	3908.2	
Citric acid	Carl Roth, Karlsruhe, Germany	X863.3	
disodium hydrogen phosphate	Merck, Darmstadt, Germany	1,065,860,500	
Sodium acetate	Merck, Darmstadt, Germany	1,062,640,050	
Glacial acetic acid	Sigma Aldrich, Munich, Germany	A6283	
LB Agar	Carl Roth, Karlsruhe, Germany	X969.2	
LB Medium	Carl Roth, Karlsruhe, Germany	X968.2	
Zyppy Plasmid Miniprep Kit	ZymoResearch, Freiburg, Germany	D4020	
QIAfilter Plasmid Midi Kit	Qiagen, Hilden, Germany	12245	
HEK293H cell line	Invitrogen, Karlsruhe, Germany	11631-017	
Dulbecco's Modified Eagle Medium	Invitrogen, Karlsruhe, Germany	31966-047	
HyClone fetal bovine serum	GE Healthcare, South Logan, Utah, USA	SV30160.03	
Penicillin/streptomycin	Invitrogen, Karlsruhe, Germany	15140-122	
CELLSTAR Standard Cell Culture Flasks, Greiner Bio One	VWR International GmbH, Hannover, Germany	82050-854	
Cell culture plates (24 well)	Sarstedt, Nümbrecht, Germany	831,836	
Cellstar 96 well plate	Greiner bio one, Frickenhausen, Germany	655185	
SafeSeal reaction tubes, 1,5mL	Sarstedt, Nümbrecht, Germany	72,706	
Lipofectamine 2000	Invitrogen, Karlsruhe, Germany	11668-019	
1-Deoxygalactonojirimycin Hydrochloride	Sigma Aldrich, Munich, Germany	D9641	
1-Deoxygalactonojirimycin Hydrochloride	Toronto Research Chemicals, Toronto, Canada	D236500	
1-Deoxynojirimycin	Sigma Aldrich, Munich, Germany	D9305	
PBS Dulbecco w/o Calcium, w/o Magnesium	Biochrom, Berlin, Germany	L 1825	
Trypsin-EDTA (0.05%), phenol red	Thermo Scientific, Braunschweig, Germany	25300054	
Pierce BCA Protein Assay Kit	Thermo Scientific, Braunschweig, Germany	23225	
4-Methylumbelliferone	Sigma Aldrich, Munich, Germany	M1381	
4-Methylumbelliferyl α-D-galactopyranoside	Sigma Aldrich, Munich, Germany	M7633	
4-Methylumbelliferyl α-D-glucopyranoside	Sigma Aldrich, Munich, Germany	M9766	
Name	Company	Catalog Number	Comments
Equipment			

incubator type T6	Heraeus Instruments, Hanau, Germany	n.a.	
Luminous Plate Gr. 2 E	Carl Roth, Karlsruhe, Germany	P265.1	
3130 xl Genetic Analyzer	Applied Biosystems, Darmstadt, Germany	n.a.	
GFL-3032 bacterial shaker	GFL, Burgwedel, Germany	n.a.	
Avanti J-25 centrifuge	Beckman/Coulter, Krefeld, Germany	n.a.	
Ultraspec 3100 <i>pro</i> Spectrophotometer	Amersham Biosciences, Buckinghamshire, United Kingdom	n.a.	
water-jacket incubator	Binder, Tuttlingen, Germany	n.a.	
Vortex Genie 1 touch mixer	Scientific Industries, Bohemia, NY, USA	n.a.	
Z 233 MK-2 refrigerated microtube centrifuge	Hermle, Tuttlingen, Germany	n.a.	
LaboStar ultrapure water device	Siemens, Berlin, Germany	n.a.	
Thermo Shaker PST-60HL-4 orbital shaker	Biosan, Riga, Latvia	n.a.	
Tecan GENios Reader	Tecan, Männedorf, Switzerland	n.a.	
HI 223 Microprocessor pH Meter	HANNA Instruments, Arvore, Portugal	n.a.	
CASY Cell Counter + Analyser System Model TT	Innovatis AG, Cham/Zug, Switzerland		
Name	Company	Catalog Number	Comments
Software			
Magellan data analysis software v6.6	Tecan, Männedorf, Switzerland	n.a.	
GraphPad Prism 5.04	GraphPad Software, Inc., La Jolla, CA; USA	n.a.	
Microsoft Office 2010	Microsoft Corporation, Redmond, WA, USA	n.a.	
BioEdit Alignment Editor, V7.0.1	http://www.mbio.ncsu.edu/bioedit/bioedit.html	n.a.	
Abbreviations			
frw = forward; rev = reverse			
n.a. = not applicable			