

Materials List for:

Enhanced Yeast One-hybrid Screens To Identify Transcription Factor Binding To Human DNA Sequences

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Materials

Name	Company	Catalog Number	Comments
3-Amino-1,2,4-triazole (3AT) ~95 % TLC	Sigma	A8056-100G	Competitive inhibitor for products of HIS3 gene
Adenine sulfate (hemisulfate), dihydrate	US Biologicals	A0865	Required for proper yeast growth
Agar High Gel Strength - Bacteriological grade	American International Chemical	AGHGUP	Nutritive media for yeast growth
Ammonium Sulfate	US Biologicals	A1450	Nitrogen source in synthetic yeast media
D+ Glucose Anhydrous	US Biologicals	G3050	Required for yeast growth
Drop-Out Mix minus His, Leu, Tryp and Uracil, adenine rich w/o yeast nitrogen base	US Biologicals	D9540-02	Synthetic complete media required for yeast growth
edge Multiparameter pH Meter	Hanna Instruments	HI2020-01	To measure pH of selective media
Flat Toothpicks 750 ct	Diamond		To streak yeasts on petridishes
Glass Beads	Walter Stern	100C	To spreak yeast when making lawns
Glycerol ≥99%	Millipore Sigma	G9012-1L	Required to make frozen yeast stocks
L-Histidine	US Biologicals	H5100	For yeast growth selection in selective media
L-Leucine	US Biologicals	L2020-05	For yeast growth selection in selective media
L-Tryptophan	Sigma	T-0254	For yeast growth selection in selective media
N,N-Dimethylformamide	Sigma	319937-1L	To make X-gal solution
Omnipense Elite	Wheaton	W375030-A	For dispensing accurate volumes of media into Singer plates
Peptone, Bacteriological	American International Chemical	PEBAUP	Protein source required for yeast growth
Petri Dish, 150 mm x15 mm	VWR	10753-950	For growing yeast baits for screening
PlusPlates	Singer Instruments	PLU-003	To make rectangular agar plates to use with Singer Robot
Precision Low Temperature BOD Refrigerated Incubator	ThermoFisher Scientific	PR205745R	To incubate yeast plates at constant temperature
RePads 1,536 short	Singer Instruments	REP-005	To transfer the TF-prey array, mate yeast, and transfer yeast to diploid selection and readout plates

RePads 384 short	Singer Instruments	REP-004	To transfer TF-prey array from 384 to 1,536 colony format
RePads 96 long	Singer Instruments	REP-001	To transfer TF-prey array from glycerol stock to agar plate
RePads 96 short	Singer Instruments	REP-002	To transfer TF-prey array from 96 to 384 colony format
Singer HDA RoToR robot	Singer Instruments		For transferring yeast in high-throughput manner
Sodium Hydroxide (Pellets/Certified ACS)	Fisher	S318-1	For adjusting pH of selective media
Sodium Phosphate dibasic heptahydrate	Santa Cruz Biotechnology	sc-203402C	Required for LacZ reporter activity on X-gal
Sodium Phosphate monobasic monohydrate	Santa Cruz Biotechnology	sc-202342B	Required for LacZ reporter activity on X-gal
Uracil	Sigma	U0750-100G	For yeast growth selection in selective media
X-gal (5-Bromo-4-chloro-3-indoxyl-beta-Dgalactopyranoside)	Gold Biotechnology	X4281C100	β -galactosidase turns colorless X-gal blue to detect protein-DNA interaction
Yeast Extract	US Biologicals	Y2010	Nutritious medium for growth and propagation of yeast
Yeast Nitrogen Base (powder) w/o AA, carbohydrate and w/o AS	US Biologicals	Y2030	Required for vigorous yeast growth