

Materials List for:

Screening for Functional Non-coding Genetic Variants Using Electrophoretic Mobility Shift Assay (EMSA) and DNA-affinity Precipitation Assay (DAPA)

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Materials

Name	Company	Catalog Number	Comments
Custom DNA Oligonucleotides	Integrated DNA Technologies		http://www.idtdna.com/site/order/oligoentry
Potassium Chloride	Fisher Scientific	BP366-500	KCl, for CE buffer
HEPES (1 M)	Fisher Scientific	15630-080	For CE and NE buffer
EDTA (0.5M), pH 8.0	Life Technologies	R1021	For CE, NE, and annealing buffer
Sodium Chloride	Fisher Scientific	BP358-1	NaCl, for NE buffer
Tris-HCl (1M), pH 8.0	Invitrogen	BP1756-100	For annealing buffer
Phosphate Buffered Saline (1x)	Fisher Scientific	MT21040CM	PBS, for cell wash
DL-Dithiothreitol solution (1 M)	Sigma	646563	Reducing agent
Protease Inhibitor Cocktail	Thermo Scientific	87786	Prevents catabolism of TFs
Phosphatase Inhibitor Cocktail	Thermo Scientific	78420	Prevents dephosphorylation of TFs
Nonidet P-40 Substitute	IBI Scientific	IBO1140	NP-40, for nuclear extraction
BCA Protein Assay Kit	Thermo Scientific	23225	For measuring protein concentration
Odyssey EMSA Buffer Kit	Licor	829-07910	Contains all necessary EMSA buffers
TBE Gels, 6%, 12 Wells	Invitrogen	EC6265BOX	For EMSA
TBE Buffer (10x)	Thermo Scientific	B52	For EMSA
FactorFinder Starting Kit	Miltenyi Biotec	130-092-318	Contains all necessary DAPA buffers
Licor Odyssey CLx	Licor		Recommended scanner for DAPA/EMSA
Antibiotic-Antimycotic	Gibco	15240-062	Contains 10,000 units/ml of penicillin, 10,000 µg/ml of streptomycin, and 25 µg/ml of Fungizone® Antimycotic
Fetal Bovine Serum	Gibco	26140-079	FBS, for culture media
RPMI 1640 Medium	Gibco	22400-071	Contains L-glutamine and 25 mM HEPES