

Materials List for:

Simultaneous DNA-RNA Extraction from Coastal Sediments and Quantification of 16S rRNA Genes and Transcripts by Real-time PCR

Enrico Tatti¹, Boyd A. McKew², Corrine Whitby², Cindy J. Smith¹

¹Microbiology, School of Natural Sciences, National University of Ireland Galway

²School of Biological Sciences, University of Essex

Correspondence to: Cindy J. Smith at cindy.smith@nuigalway.ie

URL: <https://www.jove.com/video/54067>

DOI: [doi:10.3791/54067](https://doi.org/10.3791/54067)

Materials

Name	Company	Catalog Number	Comments
Diethylpyrocarbonate	Sigma	40718	Toxic, open under chemical hood
cetrimonium bromide (CTAB)	Sigma	52365	Irritant, open under chemical hood
potassium phosphate dibasic	Sigma	RES20765	
potassium phosphate monobasic	Sigma	P9791	
Phenol : Chloroform : Isoamylalcohol pH 8	Sigma	P2069	Equilibrate at pH 8 before using
Chloroform : Isoamylalcohol	Sigma	25666	
sodium chloride	VWR	1.06404.0500	
polyethyleneglycol 6000	VWR	528877-100	
Ethanol Molecular Grade	Sigma	E7148	
Lysing Matrix E tubes	MP Biomedical	116914050	
Turbo DNase	Ambion	AM1907	
Taq polymerase	Sigma	D1806	
dNTPs	Bioline	BIO-39028	
SuperScript III	Life Technologies	18080044	
Rnase Inhibitor	Life Technologies	10777019	
RNAse/DNase free 0.2 ml PCR tubes	Sarstedt	72.985.002	
SureCleanPlus	Bioline	BIO-37047	
pGEM Easy T Vector	Promega	A1360	
<i>E. coli</i> JM109 competent cells	Promega	L2005	
Tryptone	Sigma	T7293	
Yeast Extract	Sigma	70161	
Ampicillin	Sigma	59349	
X-Gal	Bioline	BIO-37035	
IPTG	Bioline	BIO-37036	
Agar	VWR	20768.235	
Plasmid Midi Kit	Qiagen	12143	
Qubit	Life Technologies	Q33216	
Quant-IT DNA HS Assay	Life Technologies	Q-33120	
Quant-IT RNA HS Assay	Life Technologies	Q32855	
MEGashortscript kit	Ambion	AM1354	
TaqMan SensiFast Probe Lo-ROX kit	Bioline	BIO-84002	

qPCR machine			
--------------	--	--	--