

Materials List for:

HPLC Measurement of the DNA Oxidation Biomarker, 8-oxo-7,8-dihydro-2'-deoxyguanosine, in Cultured Cells and Animal Tissues

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Materials

Name	Company	Catalog Number	Comments
8-oxo-dGuo standard	Cayman Chemical Company	89320	Inappropriately referred to as "8-hydroxy-2'-deoxy Guanosine"; see Fig. 1 and text for details.
Alkaline phosphatase	Sigma-Aldrich	P5931	From <i>E. coli</i>
Chelex 100	Sigma-Aldrich	C7901	Chelates heavy metals
Desferoxamine mesylate	Sigma-Aldrich	D9533	
dGuo standard	Sigma-Aldrich	D7145	
Dibasic sodium phosphate	Sigma-Aldrich	S9390	
DNA from salmon sperm	Sigma-Aldrich	D1626	Sodium salt
DNase I	Sigma-Aldrich	D4527	Typell, from bovine pancreas
DNAzol	Invitrogen	10503-27	
Ethylenediaminetetraacetic acid disodium salt dihydrate (EDTA)	Sigma-Aldrich	E4884	The compound would not completely dissolve until solution pH is adjusted to 8.0 (e.g. with NaOH)
F12-K media	ATCC	30-2004	
Foetal bovine serum	ATCC	30-2020	
Guard column	Chromatographic Specialties	YBA 99S03 0204GC	Protects colum from contamination; may also lead to pressure build-up
Magnesium chloride	Sigma-Aldrich	M8266	
Monobasic sodium phosphate	Sigma-Aldrich	S9638	
Penicillin-Streptomycin	Invitrogen	15140-122	
Phosphate buffered saline	Invitrogen	15190-250	
Phosphodiesterase I enzyme	Sigma-Aldrich	P3243	Type II from <i>Crotalus adamaneus</i> venom
Teflon homogenizer	Thomas Scientific	7724T-1 or 7724T-5 for 1 or 5 mL, respectively	Volume (holding capacity) depends on the amount of sample to be processed.
Trypsin	Invitrogen	15050-065	
YMC-BASIC column with bonded spherical silica	Chromatographic Specialties	YBA 99S03 1546WT	