

Materials List for:

Mechanical Stimulation of Stem Cells Using Cyclic Uniaxial Strain

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Materials

Name	Type	Company	Catalog Number	Comments
Fungizone	Reagent	Lonza Inc.	17-836R	aliquot is 250 ug/mL, 100x, stored in -20C.
Kanamycin	Reagent	GIBCO, by Life Technologies	15160-054	50 ug/mL final concentration. Store stock solution at 10 mg/ml in -20C.
Gentamicin	Reagent	Lonza Inc.	17-518Z	50 ug/mL final concentration. Store 1000x stocks at 50 mg/mL in -20C.
Pen/Strep	Reagent	GIBCO, by Life Technologies	15140-122	1% final. (Also available from other companies)
Dulbecco's Modified Eagle's Medium	Reagent	GIBCO, by Life Technologies	11966-025	

Notes on media: These uniaxial stretch experiments are prone to contamination due to the complexity of bioreactor setup. To combat this, we have tried various combinations of antibiotics and antifungal agents. The 1% fungizone usually necessary, along with a combination of antibiotics. Either use a Pen/Strep combination, OR use a combination of Kanamycin and Gentamicin (but DO NOT try using a combination/cocktail of three or more antibiotics together as it may lead to resistant mutant bacteria, and may also be detrimental to the cells).