MUG-Chor1

Introduction

The MUG-Chor1 cell line was developed by Beate Rinner and Bernadette Liegl at the Medical university of Graz from a recurrent sacral chordoma in a 57 year old female. It is one of the faster growing chordoma lines that grows faster on collagen coated vessels.

Media formulation

Materials

- IMDM (Gibco, Cat# 12440079)
- RPMI 1640 (Gibco, Cat# 11875085)
- FBS, Certified, US (Gibco, Cat# 16000044) or equivalent quality FBS
- MEM NEAA (Corning, Cat# 25-025-CIR)
- GlutaMAX (Gibco, Cat#35050061)
- Nalgene Rapid-Flow Vacuum Filter (Thermo Scientific, Cat# 5660010)

(4:1) IMDM/RPMI 1640 + 10% FBS + 1% NEAA + 1% GlutaMAX media preparation protocol

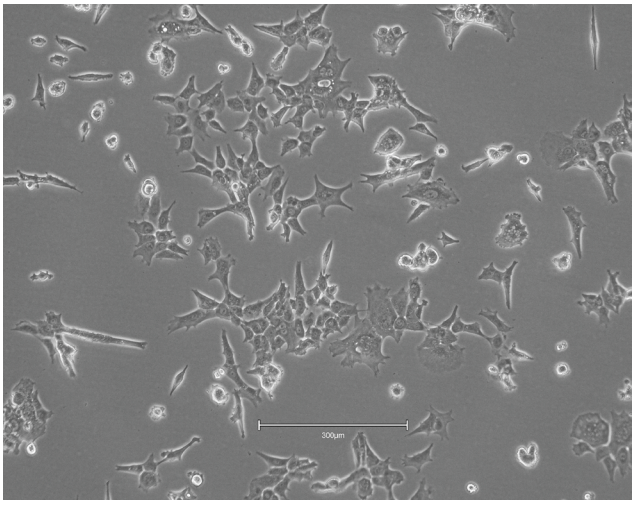
1. Prepare media in the bio-safety cabinet using aseptic technique. This media is made without antibiotics so extra precautions need to be taken.
2. Douse items in 70% Ethanol and place in bio-safety cabinet. Wait at least 10 minutes so ethanol has a chance to disinfect. Check for liquid at base of cap, if present, aspirate.
3. Create 500mL of media using volumes to the right by pipetting the media components into the upper compartment of a 500mL Nalgene vacuum filter, filter the components, and then store media at 4°C.

Component	Volume (mL)
IMDM	352
RPMI	88
FBS	50
NEAA	5
Glutamax	5
Total	**500**

Culturing characteristics

This cell line is thawed using CF Labs general thawing protocol, found here. This line can be grown on standard tissue culture treated, non-collagen coated vessel surfaces; however, MUG-Chor1's proliferation is increased when grown on collagen coated surfaces. The viability of this cell line is not affected if grown in the absence of collagen. Using the above media formulation and grown on a collagen coated surface, MUG-Chor1 cells exhibit a doubling time of approximately four days. The cell line exhibits a heterogeneous physaliferous morphology. **(A)** MUg-Chor1 representative image. This cell line has somewhat of a heterogeneous morphology. Some cells exhibit a spindly morphology. **(B)** In a 96-well plate, plating 3,000 cells/well (9,375 cells/cm^2) will yield 15% confluence 36 hours after plating, labeled as day 0 where 36 hours is the time allowed for cells to adhere and spread out on the plate. The cells reach 90% confluence after nine days. This information can be extrapolated to other vessel types.

A.



B.