Generation of Collagen: Matrigel mixed Gel

1) Neutralize collagen:

On ice, mix:

0.5 ml Collagen Type I (Vitrogen, bovine dermal collagen, from Cohesion Technologies, www.cohesiontech.com, at 2.9-3.2 mg/ml),

62.5 µl 10X PBS (sterile filtered),

62.5 µl 0.1 M NaOH (sterile filtered).

Bring the pH of the solution to 7.5 with approximately 10 µl 0.1 N HCl.

2) Mix with Matrigel

On ice, mix the neutralized collagen I and growth factor reduced MatrigelTM such that the final collagen concentration is 1.6 mg/ml*

(For example, if the lot of collagen is 2.9 mg/ml and you want to keep final concentration at 1.6 mg/ml, use 45% MatrigelTM and 55% Collagen).

*In practice, we routinely just mix the neutralized collagen I and EHS 1:1 for an approximate 50/50 mix.

3) Make bed of mixed gel in chamber slides

Spread 50ul per well in an 8-well chamber slide.

Work as quickly as possible since collagen tends to solidify even on ice in a short time.

Incubate for 30-60 minutes at 37°C. Change medium as described before.