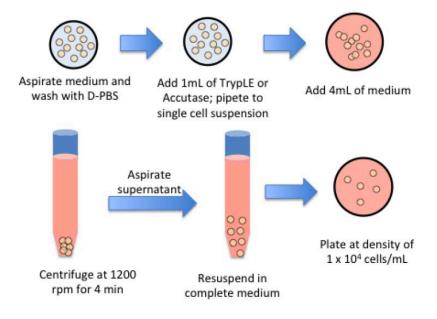
Title	Passaging Neural Stem Cells (Adherent Culture)	
Date Submitted	May 5, 2012	
Submitted by -	Efthymiou, Anastasia - anastasia.efthymiou@nih.gov	
Adapted from -	Gibco Protocol	
Contributors -	Efthymiou, Anastasia	
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Introduction:



Protocol:

- 1. Aspirate the medium and wash with D- PBS without Ca2+ and Mg2+.
- 2. Add 1 mL of TrypLE Express or StemPro Accutase to the culture vessel. Note: The monolayer lifts off from the culture dish within 30 seconds of application of TrypLE Express or StemPro Accutase.
- 3. Gently pipette to loosen monolayer into a single cell suspension. Neutralize the treatment by adding 4 mL of medium. Do not treat the cells for longer than 3 minutes after addition of TrypLE Express or StemPro Accutase.
- 4. Spin down the cells by centrifugation at 1,200 rpm for 4 minutes. Aspirate and discard the supernatant.
- 5. Resuspend the cells in StemPro NSC SFM complete medium.
- 6. Count the cell number
- 7. Plate cells in fresh medium on a CELLstart CTS or Fibronectin- coated plate at a density of 1×10^{4} to 1×10^{5} cells/cm2, or split the cells at a 1:4 ratio.

Materials:

Neurospheres			
D-PBS without Ca++ and Mg++			
TrypLE Express or StemPro Accutase			
StemPro NSC SFM complete medium			
CELLstart CTS or Fibronectin-coated plate			
StemPro NSC SFM complete medium			
Component Fin	nal concentration	Amount	
KnockOutTM D-MEM/F-12	1X	97 mL	
GlutaMAXTM-I Supplement	2 mM	01 mL	
bFGF	20 ng/mL	20 µg	
EGF	20 ng/mL	20 µg	
StemPro [®] Neural Supplement	t 2%	2 mL	

Troubleshooting:

***** References: