Low-Speed Viral Concentration Kit Handbook

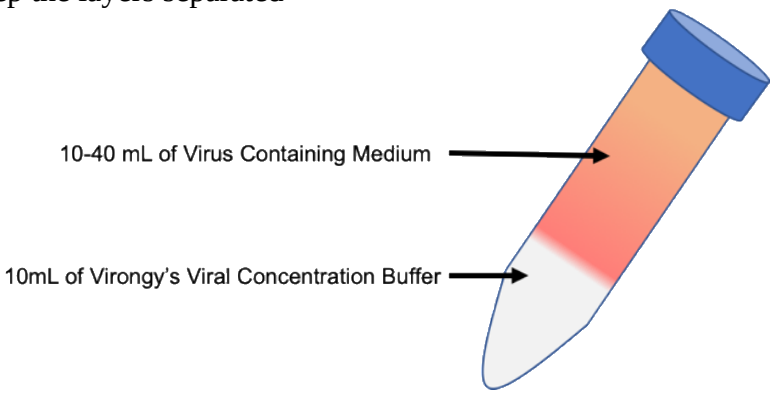
Virongy's Low-Speed Viral Concentration Kit is designed to enhance virus titer, maximize transduction efficiency and increase particle purity. Our propriety **Viral Concentration Buffer** comes sterile and ready-to-use for concentrating viruses, pseudoviruses, nanoparticles (50-200nm) and extracellular vesicles. The Viral Resuspension Buffer is cell culture and animal safe, for research purposes only. The concentrated viral particles have up to 10x the transduction efficiencies and the higher purity enhances cryo-electron microscopy imaging. The low-speed protocol does not require an ultra-centrifuge and can be scaled to any size of particle preparation.

I. Equipment, Supplies and Reagents

Equipment Not Included:	**Recommended (Vendor, Cat No)**
Centrifuge (Fixed Angle 50mL Tube Rotor)	Sorvall SA-600
50mL Centrifuge Tubes	Genesee Scientific Cat #: 21-108
Reagents Included:	
Virongy's Viral Concentration Buffer	Virongy #LSVCKit-01

II. User Guide:

1. Harvest the virus or particle containing supernatant on ice and filter through a 0.45µm filter to remove cells and debris
2. Prepare the centrifuge tube by adding 10 mL of **Virongy's Viral Concentration Buffer** to the bottom of a 50 mL conical centrifuge tube
3. Carefully to the side of the tube, slowly add 10-40mL of the virus/particle containing supernatant so the two solutions form two distinct layers. Avoid moving or shaking the tubes to keep the layers separated



4. Carefully transfer the tube to a pre-cooled centrifuge at 4°C and spin the virus and viral concentration buffer solutions at 10,000xg for 4 hours.
5. After the spin carefully decant the supernatant and blot the tube dry.
6. Resuspend the viral pellet in the desired volume of **Resuspension Buffer** (Typically: 100-500µL) of your choice, usually **PBS** or **Serum Free Culture Media**. **Recommended:** Allow the virus to recover at 4°C overnight before aliquoting and storing.