Extracellular Vesicles from Human Airway Basal Cells Respond to Cigarette Smoke Extract and Affect Vascular Endothelial Cells

Ashish Saxena, MD, PhD^{1*}, Matthew S. Walters, PhD^{2,3}, Jae-Hung Shieh, PhD¹, Ling-Bo Shen, MS¹, Kazunori Gomi, PhD², Robert J. Downey,

MD⁴, Ronald G. Crystal, MD², Malcolm A.S. Moore, DPhil¹

¹Department of Cell Biology, Sloan Kettering Institute, Memorial Sloan Kettering Cancer Center, New York, New York

²Department of Genetic Medicine, Weill Cornell Medicine, New York, New York

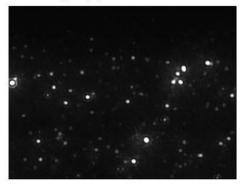
³Department of Medicine, Division of Pulmonary, Critical Care, & Sleep Medicine, University of Oklahoma Health Sciences Center, Oklahoma City,

Oklahoma

⁴Thoracic Service, Department of Surgery, Memorial Sloan Kettering Cancer Center, New York, New York

Supplementary Figure 1

Fully Supplemented BEGM



20 X 10⁸ particles/mL

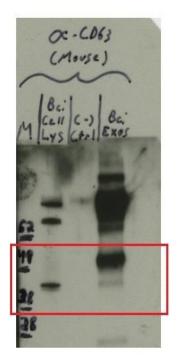
BEGM w/ All Supplements Except BPE

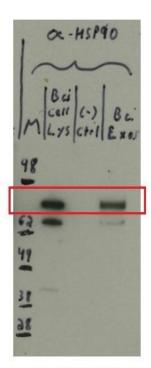


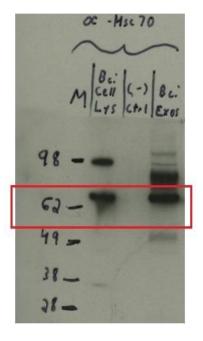
1.6 X 10⁸ particles/mL

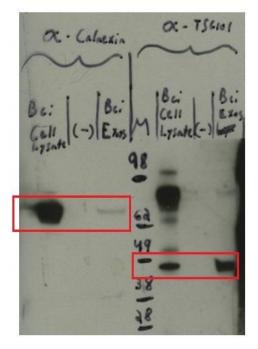
Supplementary Figure 1. The BPE supplement in BEGM contains contaminating microparticles. Representative images of microparticles present in fully supplemented BEGM and those seen in BEGM without BPE are shown. BPE appears to contain the vast majority of microparticles. Images were obtained using the NanoSight NS500 machine with Nanoparticle Tracking Analysis software.

Figure 1B Full Immunoblots



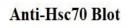






Anti-CD63 Blot

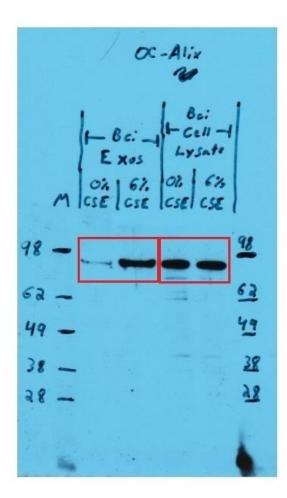




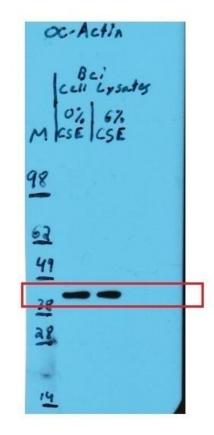
Anti-Calnexin and Anti-TSG101 Blots

Red rectangles denote bands that were cropped for figure Numbers under "M" column denote molecular weight in kilodaltons

Figure 2C Full Immunoblots



Anti-Alix Immunoblot



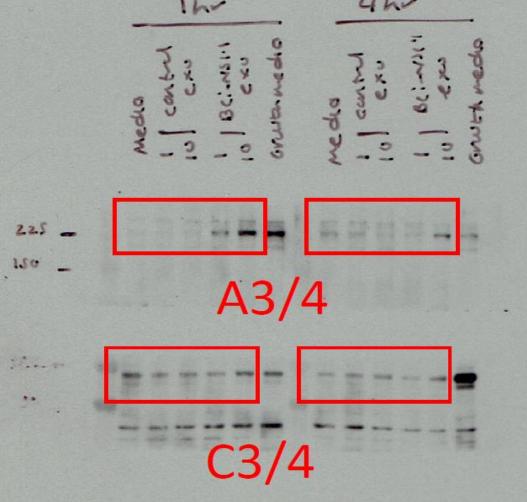
Anti-Actin Immunoblot

Red rectangles denote bands that were cropped for figure Numbers under "M" column denote molecular weight in kilodaltons

Figure 5A Full Immunoblots

Red rectangles denote bands that were cropped for figure

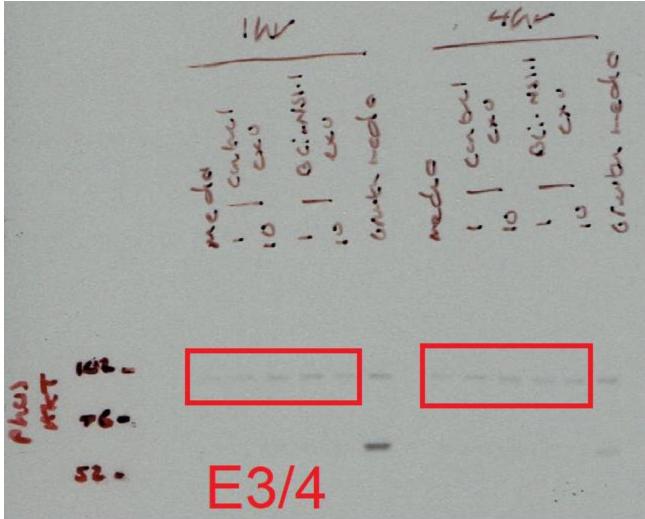
A = Phosphorylated VEGR2 Immunoblot C = Phosphorylated STAT3 Immunoblot 3/4 = 1 hour and 4 hour incubation with Bci-NS1.1 cell EVs

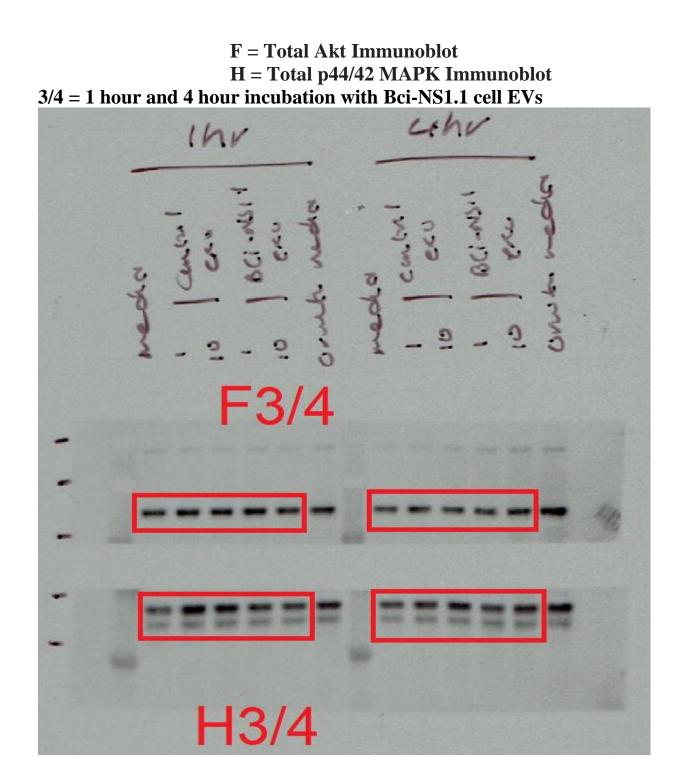




GUN 141 3 20 20 3 10.08 - 81.74 **B**3/ 4 **D3/4**

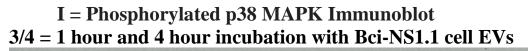






445 140 0c -0 G3/4

G = Phosphorylated p44/42 MAPK Immunoblot 3/4 = 1 hour and 4 hour incubation with Bci-NS1.1 cell EVs



2 hr Ihr BC. NSI BC. # 040 1002 CK ed a n th eda 3 0, 3 322 52 -. phes 38-30 13/4 a



