



Figure S1. Illustration of the mini-bioreactor and ACPB system. **(A)** Self-rotating incubator with vessels. **(B)** Vessels packed with a polymer fiber carrier. **(C)** Photomicrograph (200 \times) of polymer fiber carrier. **(D)** AmProtein Current Perfusion Bioreactor. **(E)** 5 L disposable plastic perfusion column. **(F)** 10 L disposable plastic bioreactor bag with DO, pH, and temperature probes.