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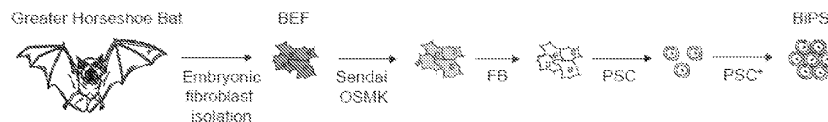


FIG. 1A

(57) Abstract: Induced pluripotent stem cells would offer a research tool for bat research. Disclosed herein are compositions and methods of making and using bat IPSCs (BipS). Also disclosed herein are methods and compositions of virus nucleic acids residing in bat IPSCs. Also disclosed are nucleotides, cells, and methods associated with the compositions including their use as vaccines.

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