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(54) **Title**: METHODS FOR CULTIVATING CELLS, PROPAGATING AND PURIFYING VIRUSES

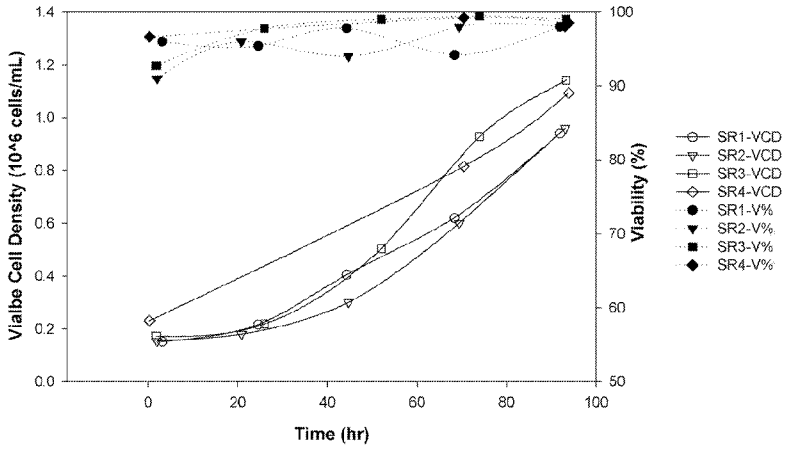


Fig. 1

(57) **Abstract**: A novel serum-free cell culture medium and methods for cultivating MDCK cells are presented. In particular, non-tumorigenic MDCK cells. Methods for producing influenza viruses (e.g., particularly cold-adapted, and/or temperature sensitive, and/or attenuated influenza viruses) that eliminate the need for a cell culture medium exchange step are provided. The novel medium and methods are useful to grow influenza viruses, in cell culture to high titer. The present invention further provides purification methods for purifying influenza viruses with high overall recovery of live virus and result in levels of host cell DNA (HCD), host cell protein (HCP) and non-specific endonuclease (e.g., Benzonase), which are below the specifications required by regulatory agencies.

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