

## Reprogramming of PBMCs and culture hiPSC

PBMCs were obtained from sAD subjects' venous blood, cultured in chemically defined expansion medium (CDEM, Help Stem Cell Innovation, China), and then reprogrammed with CytoTune 2.0 Sendai Reprogramming Kit (Cat No A34546, Thermo Fisher Scientific, USA). The transfected PBMCs were expanded for four days in CDEM. On day 4, the reprogrammed PBMCs were sub-cultured onto 6 well plate coated with Geltrex matrix (Cat No A1569601, Thermo Fisher), and cultured in complete StemPro-34 medium (Cat No 10639011, Thermo Fisher). On day 7, the StemPro-34 culture medium was replaced with Essential 8 medium (Cat No A1517001, Thermo Fisher). From day 17-20, the visible colonies of primary sAD-hiPSCs were selected, replated on Geltrex coated wells and cultured in Essential 8 medium. After 7-10 days of colony selection, 5-6 healthy colonies were expanded for further growth. The programmed sAD-hiPSC lines were then passaged and expanded in every 4-7 days, using Gentle Cell Dissociation Reagent (Cat No 07174, Stem Cell Technologies, Canada) in a 1:3 ratio.