Citric Acid Cycle All SiRCle Clusters ACSS2 GOT1 ME1 PCK1 **ACLY** ALDH5A1 MDH1B ACO2 ALDH4A1 SLC16A7 **PDHX** SUCLG2 IDH3B FΗ SLC16A1 PC **PDHB** ALDH1B1 ACO1 ME3 **SLC25A10** FAHD1 SLC25A1 PDHA1 CS DLST PCK2 MDH2 **SDHA DLAT** SUCLG1 **SDHD** IDH1 IDH3A ACSS1 SLC25A11 DLD **CLYBL** IDH2 SDHC SUCLA2 **SDHB OGDH** GOT2 SLC13A2

VAE integrated value

SLC13A3

-2

VAE Integrated Rank (Mean)

-1

Condition

Old

2

1

Young