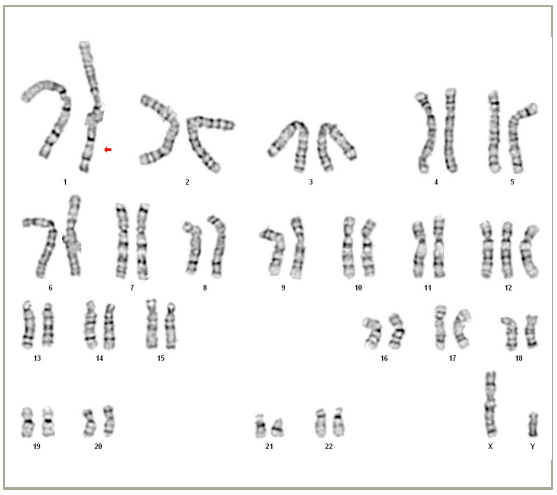
Chromosome Analysis Report: 007604

Report Date: March 23, 2012

Cell Line: RIV 22
Passage #: 18
Date of Sample: 3/15/2012
Date Completed: 3/23/2012

Specimen: iPSC on Matrigel
Cell Line Gender: Male
Reason for Testing: new line
Investigator: Duncan Liew, UC Riverside

Results: 46,XY,dup(1)(q32.1q32.3)[14]/47,XY,dup(1)(q32.1q32.3),+12[6]



Cell: S02-20
Slide: 2-R1(16)KARYOTYPE
Slide Type: Karyotyping

# of Cells Counted: 20
# of Cells Karyotyped: 4
# of Cells Analyzed: 8
Band Level: 425-525

Interpretation:

This is an abnormal karyotype with two related aberrant clones. The predominant clone (fourteen of twenty cells examined) has a structural abnormality in the long (q) arm of chromosome 1 as the only abnormality. This aberration appears to be an interstitial duplication. The secondary clone (six of twenty cells examined) has trisomy 12 in addition to the 1q abnormality. Both abnormalities are recurrent in human pluripotent stem cell cultures. Parental cell line karyotyping is recommended to determine the basis of the structural change.

Completed by Kim Leonhard, CG(ASCP), on 3/22/2012
Reviewed and interpreted by Karen Dyer Montgomery, PhD, FACMG, on 3/23/2012

A signed copy of this report is available upon request.

Date:_____ **Sent To:**_____
Sent By:_____ **QC Review By:** _____

Limitations: This assay allows for microscopic visualization of numerical and structural chromosome abnormalities. The size of structural abnormality that can be detected is >3-10Mb, dependent upon the G-band resolution obtained from this specimen. For the purposes of this report, band level is defined as the number of G-bands per haploid genome. It is documented here as "band level", i.e., the range of bands determined from the four karyograms in this assay. Detection of heterogeneity of clonal cell populations in this specimen (i.e.,mosaicism) is limited by the number of metaphase cells examined, documented here as "# of cells counted".