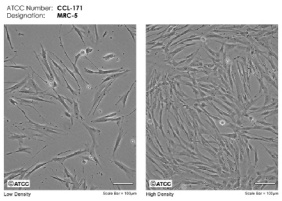
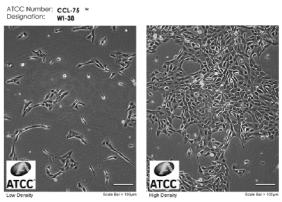
MRC-5 (ATCC® CCL-171™)

Organism: ***Homo sapiens*, human** / Cell Type: **fibroblast** / Tissue: **lung** / Disease: **Normal**

Karyotype	Chromosome Frequency Distribution 50 Cells: 2n = 46. This is a normal diploid human cell line with 46,XY karyotype. The modal chromosome number was 46, occurring in 70% of cells. The rate of polyploidy was 3.6%. Both X and Y chromosomes were normal. Note: Cytogenetic information is based on initial seed stock at ATCC. Cytogenetic instability has been reported in the literature for some cell lines.
Images	
Derivation	The MRC-5 cell line was derived from normal lung tissue of a 14-week-old male fetus by J.P. Jacobs in September of 1966.
Clinical Data	Caucasian male 14 weeks gestation
Virus Susceptibility	Human poliovirus 1 Herpes simplex virus Vesicular stomatitis, Glasgow (Indiana) Vesicular stomatitis, Orsay (Indiana)
Comments	The cells are capable of 42 to 46 population doublings before the onset of senescence.

WI-38 (ATCC® CCL-75™)

Organism: ***Homo sapiens*, human** / Cell Type: **fibroblast** / Tissue: **lung** / Disease: **normal**

Karyotype	normal diploid
Images	
Derivation	The WI-38 human diploid cell line was derived by Leonard Hayflick from normal embryonic (3 months gestation) lung tissue.
Clinical Data	3 months gestation fetus Caucasian female
Virus Susceptibility	Vesicular stomatitis, Glasgow (Indiana) Herpes simplex virus Pseudorabies virus Human poliovirus 1
Comments	WI-38 cells have a finite lifetime of 50 plus or minus 10 population doublings with a doubling time of 24 hours. This line was the first human diploid cell line to be used in human vaccine preparation. The 8th passage ampule from which this freeze was derived was found to contain a bacterial contaminant (a micrococcus). The cell line was subsequently cured by several passages in the presence of antibiotics. Growth of the cells is enhanced by addition of tumor necrosis factor alpha (TNF alpha) to the medium. This cell line is negative for reverse transcriptase.