

## CASY<sup>VIVO</sup> Cell Counter & Analyzer - Powering Breakthroughs in Cell Research

### The Role of Precise Quantification in Stem Cell Reprogramming

Salti et al. (2021). High Glycolytic Activity Enhances Stem Cell Reprogramming of Fahd1-KO MEFs; *Cells*, 10(8), 2040. DOI: 10.3390/cells10082040.

Stem Cell; Fibroblasts Reprogramming	
Index	SC5
Standardization	
Counting	X
Viability	
Volume	

#### The Challenge:

To understand the role of FAHD1 in stem cell reprogramming, researchers needed to accurately track the proliferation of Fahd1-KO and WT mouse embryonic fibroblasts (MEFs) over an extended period (37 days).

#### CASY's Contribution:

The CASY Cell Counter & Analyzer System was utilized for precise cell counting of detached MEFs at various time points. This enabled accurate calculation of cumulative population doubling levels and reliable comparison of growth curves between Fahd1-KO and WT MEFs over 37 days.

#### Key Benefits to Researchers:

- **Accurate Proliferation Tracking:** Obtain precise cell counts over extended periods for accurate calculation of population doubling levels and proliferation rates.
- **Reliable Growth Curve Comparisons:** Facilitate consistent and reproducible measurements, enabling confident comparisons of growth kinetics between different cell lines.
- **Streamlined Repetitive Assays:** Benefit from CASY's ease of use and automation, making it ideal for repetitive cell counting at multiple time points essential for detailed growth curve analysis.
- **Non-invasive & Gentle:** The gentle cell handling process helps maintain cell integrity, crucial for subsequent downstream applications.

CASY Precisely Tracks MEF Proliferation Over Extended Periods, Facilitating Growth Curve Comparisons in Stem Cell Reprogramming

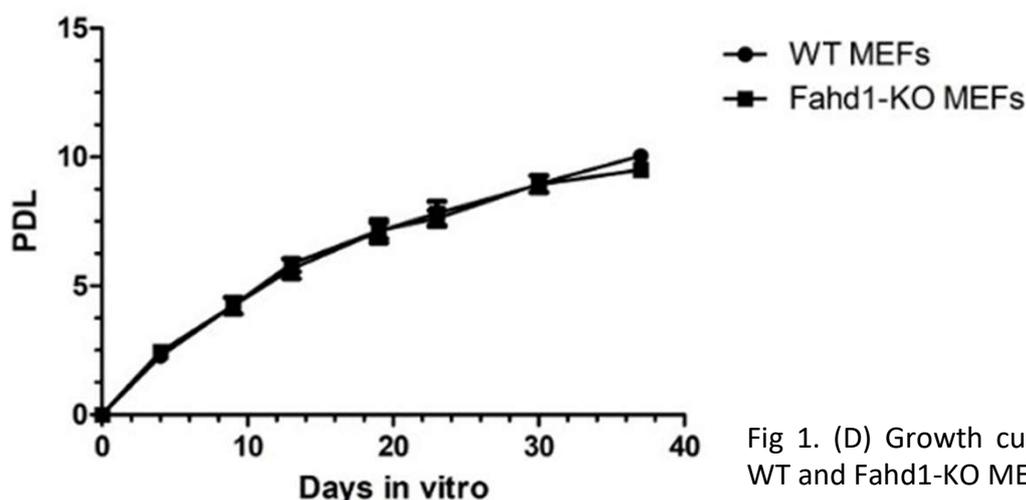


Fig 1. (D) Growth curve comparison between WT and Fahd1-KO MEFs for 37 days in vitro