

Translation on Demand

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submitted by Elias Schwall

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Reviewers:

Prof. Dr. Andreas Beyer

Prof. Dr. Achim Tresch

Supervised by:

Luke Brandwood



Declaration of originality

I hereby declare that this thesis is my own work and that no other sources and tools than stated were used.

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Elias Schwall

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Abstract

Introduction

Embryonic stem cells

Translation on demand

Translation on demand as a developmental mechanism

2i Condition for maintaining naive pluripotency

Aim of this study

Methods and tools

Data overview and processing

Translation on demand metrics

RNA-Seq

Proteomics

Ribo-Seq

Gene Overrepresentation Analysis

Gene set enrichment analysis

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Results

Early development is shaped by ToD

**Gene overrepresentation analysis reveals time dependent pathway²
regulation of developmental terms**