

# Signal Transduction Kinase Cascades

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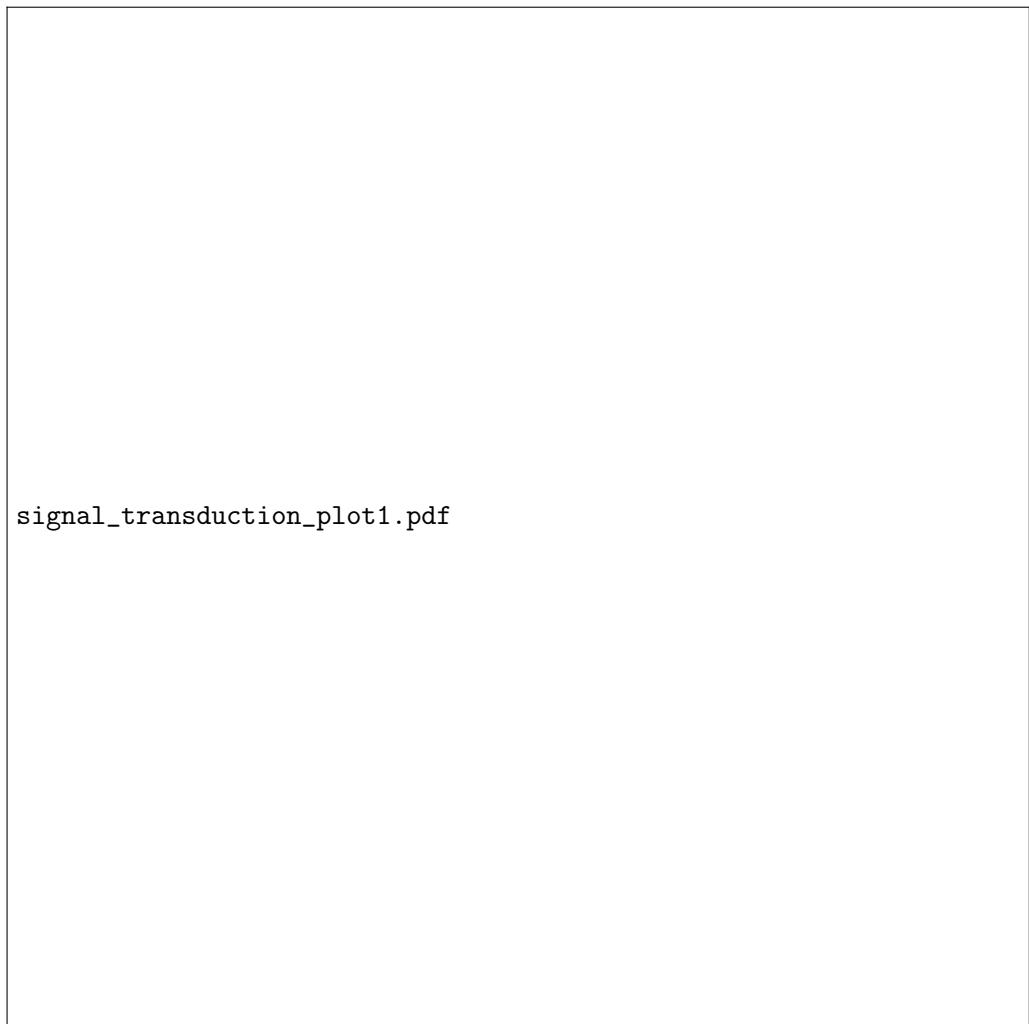
## **Abstract**

Cellular signaling pathway dynamics.

## **1 Introduction**

This report presents computational analysis of signal transduction.

## 2 Mathematical Framework



signal\_transduction\_plot1.pdf

Figure 1: Primary analysis results.

### 3 Secondary Analysis

signal\_transduction\_plot2.pdf

Figure 2: Secondary analysis comparison.

## 4 Parameter Study



Figure 3: Parameter sensitivity analysis.

## 5 2D Visualization



signal\_transduction\_plot4.pdf

Figure 4: Two-dimensional field visualization.

## 6 Distribution Analysis

signal\_transduction\_plot5.pdf

Figure 5: Statistical distribution analysis.

## 7 Time Series



signal\_transduction\_plot6.pdf

Figure 6: Time series visualization.

## 8 Results Summary

## 9 Conclusions

This analysis demonstrates the computational approach to signal transduction.