Filtering Genes

Prediction of Targeting miRNAs

**Priority 1:**
Seed Match, Binding Energy and 2° Structure

**Priority 2:**
No 2° Structure Restriction

**GeneAct:**
miRanda, Differential Binding Sites, Multiple Binding Sites

Combination of:
Priority 1, Priority 2
AND
GeneAct Prediction

Candidate List of miRNAs (Table 6)

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**Table 6**

<table>
<thead>
<tr>
<th>miRNA</th>
<th>TA 5d Post Injury</th>
<th>TA 12h Post Injury</th>
<th>TA 48h Post Injury</th>
<th>Freshly Isolated Satellite Cell</th>
<th>Proliferating Satellite Cell</th>
<th>Quiescent Satellite Cell</th>
</tr>
</thead>
<tbody>
<tr>
<td>miR-16</td>
<td>10^1</td>
<td>10^{-2}</td>
<td>10^{-2}</td>
<td>Not Detected</td>
<td>Not Detected</td>
<td>Not Detected</td>
</tr>
<tr>
<td>miR-93</td>
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<tr>
<td>miR-106b</td>
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<td>Not Detected</td>
</tr>
<tr>
<td>miR-107</td>
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<td>10^{-1}</td>
<td>10^{-1}</td>
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</tr>
<tr>
<td>miR-124</td>
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</tr>
<tr>
<td>miR-200b</td>
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<td>10^{-1}</td>
<td>10^{-1}</td>
<td>Not Detected</td>
<td>Not Detected</td>
<td>Not Detected</td>
</tr>
</tbody>
</table>

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**Figure Legends**

A. Diagram showing the process of filtering genes and predicting targeting miRNAs.

B. Graph showing relative miRNA levels in uninjured TA muscle.

C. Graph showing relative miRNA levels in TA 12h Post Injury.

D. Graph showing relative miRNA levels in TA 48h Post Injury.

E. Graph showing relative miRNA levels in TA 5d Post Injury.

F. Graph showing fold difference in miRNA levels in TA muscle over time.

G. Graph showing relative miRNA levels in freshly isolated satellite cells.

H. Graph showing relative miRNA levels in proliferating satellite cells.

I. Graph showing relative miRNA levels in quiescent satellite cells.

J. Graph showing fold difference in miRNA levels in satellite cells over time.