Supplemental Figure S1: Quantitative ataxia progression in PRDX3 disease-piloting observations. (A) Cross-sectional (n=5) and longitudinal (n=3) disease progression of ataxia indicated by the individual SARA score relative to age. Solid and dashed lines indicate mean and 95% confidence interval of a linear regression through all available SARA scores. (B) Progression of functional impairment according to the Spinocerebellar Degeneration Functional Score (SDFS).
Table S1: Fisher's exact test shows enrichment of biallelic $PRDX3$ variants in ataxia

<table>
<thead>
<tr>
<th></th>
<th>Individuals without biallelic $PRDX3$ variants</th>
<th>Individuals with biallelic $PRDX3$ variants</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individuals with ataxia phenotype (GENESIS)</td>
<td>1716</td>
<td>5</td>
<td>1721</td>
</tr>
<tr>
<td>Individuals with other phenotypes (GENESIS)</td>
<td>8183</td>
<td>0</td>
<td>8183</td>
</tr>
<tr>
<td>Total</td>
<td>9899</td>
<td>5</td>
<td>9904</td>
</tr>
</tbody>
</table>

Fisher's exact test

The two-tailed P value equals 0.0002

The association between rows (groups) and columns (outcomes) is considered to be extremely statistically significant.
**Figure 3A**

- Ladder
- PRDX3

**Figure 3B**

- Ladder
- PRDX3

**Figure 4B**

- Ladder
- PRDX3

* Non specific bands