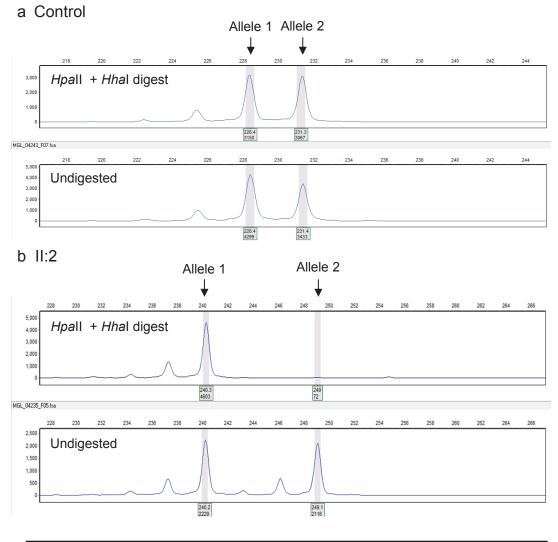
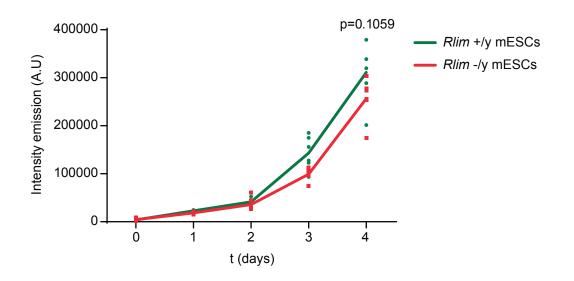
Supplementary Figure 1



| Subject | Fragment length (bp) allele 1 | Fragment length (bp) allele 2 | Cells with allele 1 as active X- chromosome (%) | Cells with allele 2 as active X- chromosome (%) |
|---------|-------------------------------------|-------------------------------------|---|---|
| Control | 228 | 231 | 50 | 50 |
| ll:2 | 240 | 249 | 5 | 95 |

Supplementary Figure 1: Skewed X-chromosome inactivation in the proband's mother (II:2). DNA was subjected to methylation sensitive restriction enzyme digestion followed by PCR and fragment analysis. The inactive X-chromosome is not digested. Figure was generated using SoftGenetics GeneMarker v2.7 (https://softgenetics.com/GeneMarker.php).

Supplementary Figure 2



Supplementary Figure 2: Proliferation curves for indicated mESC lines cultured in LIF/FCS as determined by MTS assay. Data are represented as mean ± standard error of the mean (n=3). Statistical significance was determined by student's t-test. Figure was generated using Graphpad Prism v8.0 (https://www.graphpad.com/scientific-software/prism/).

Supplementary Figure 3: Unprocessed gels and blots

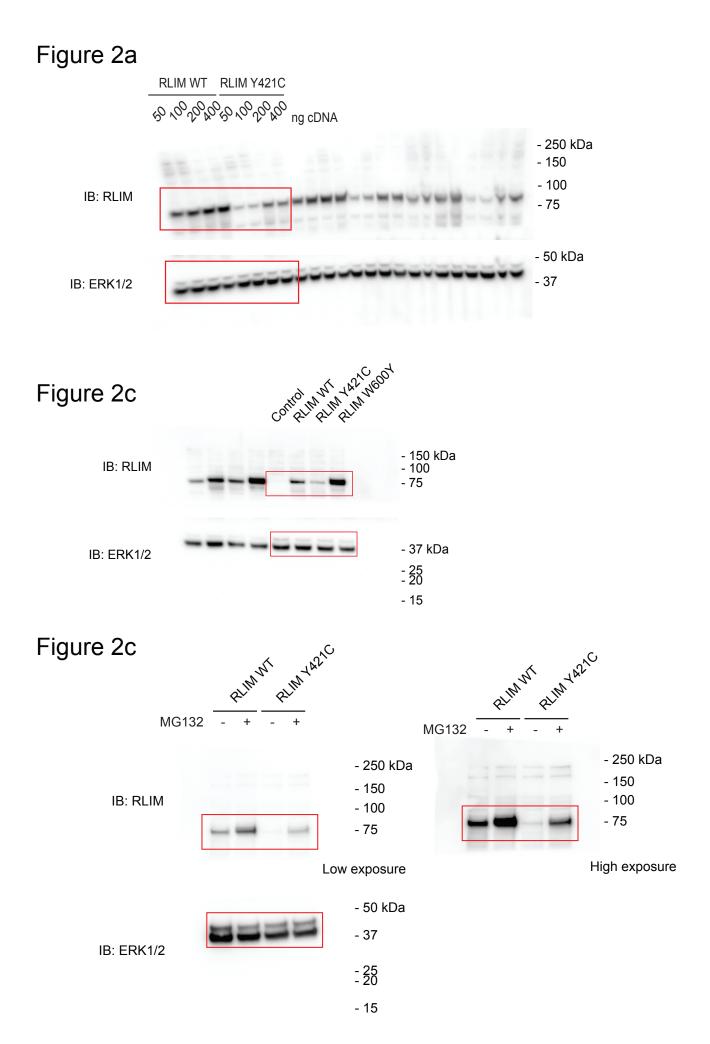
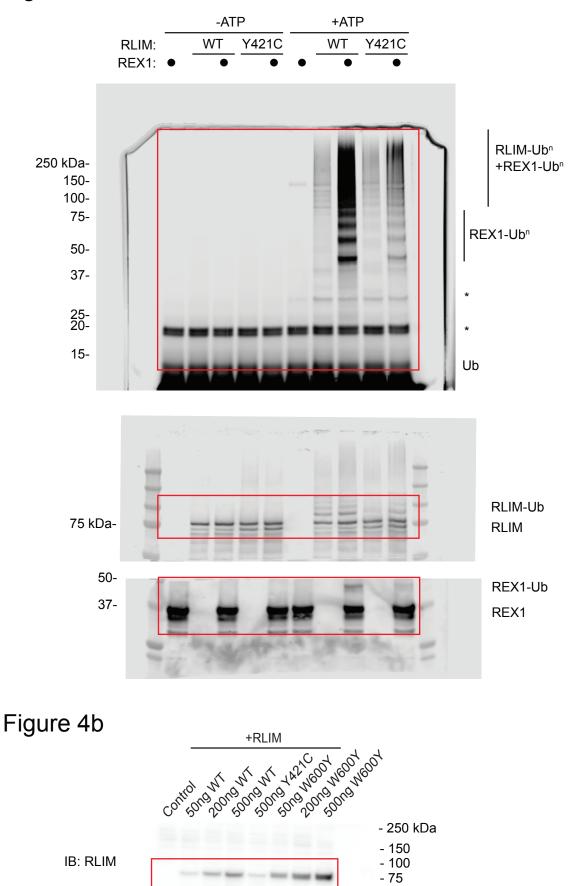


Figure 3a



- 50

- 37

IB: ERK1/2

1/2