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## Supporting Information

Additional Supporting Information may be found in the online version of this article:

**Data S1.** Supplementary Methods

**Table S1.** Primer pairs used to amplify the *NOTCH3*, *HES1*, and *HES5* coding sequences.

**Figure S1.** Sequence analysis of the *NOTCH3* mutation in the family of proband B.

**Figure S2.** Mean ER chaperone/ $\beta$ -actin ratios from densitometry analysis of data presented in Figure 3. The levels of all three chaperones were significantly decreased in cells expressing T900P-*NOTCH3* compared with those expressing wild-type *NOTCH3* (WT). \* $P < 0.05$ .

**Figure S3.** Western blotting of *NOTCH3* degradation.

Stable cells were treated with (Tet+) or without (Tet-) tetracycline (2  $\mu$ g/mL) for 24 h and then incubated in medium without tetracycline. Cells were harvested on days 0, 1, and 2 and were subjected to SDS-PAGE and western blot analysis. The data are representative of experiments performed for three stable cell lines (WT-17, G840E-36, and T900P-33). Experiments were performed twice for each stable cell line.

