

Figure S1. Assessment of RNA quality and expression in cervical cancer cell lines. (A) Representative image showing the quality of the RNA isolated from the C33A, SiHa and HeLa cervical cancer cell lines in lane 1, 2 and 3, respectively. (B) Representative amplification plot showing the expression of β -actin (internal control), NUP50, NUP98 and NUP160, presented as a plot of RFU vs. number of cycles obtained using SYBR Green chemistry. NUP, nucleoporin; RFU, relative fluorescence units.

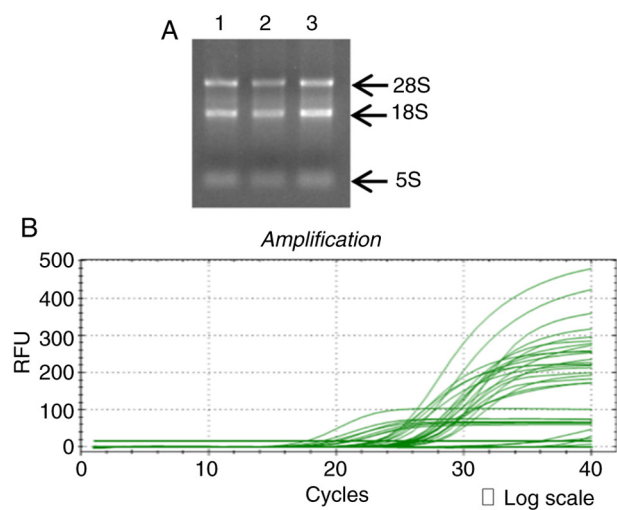


Figure S2. Protein-protein interaction network of 10 hub genes constructed using Cytoscape. The decreasing order of significance is represented by a color gradient from red to orange to yellow. The Ensemble protein IDs for the proteins in the figure are as follows: 9606.ENSP00000261396 (NUP133), 9606.ENSP00000371155 (NUP58), 9606.ENSP00000458954 (NUP88), 9606.ENSP00000316032 (NUP98), 9606.ENSP00000448054 (NUP37), 9606.ENSP00000345895 (NUP50), 9606.ENSP00000373312 (SEC13), 9606.ENSP00000285968 (NUP205), 9606.ENSP00000245544 (NUP153) and 9606.ENSP00000367721 (NUP160). NUP, nucleoporin.

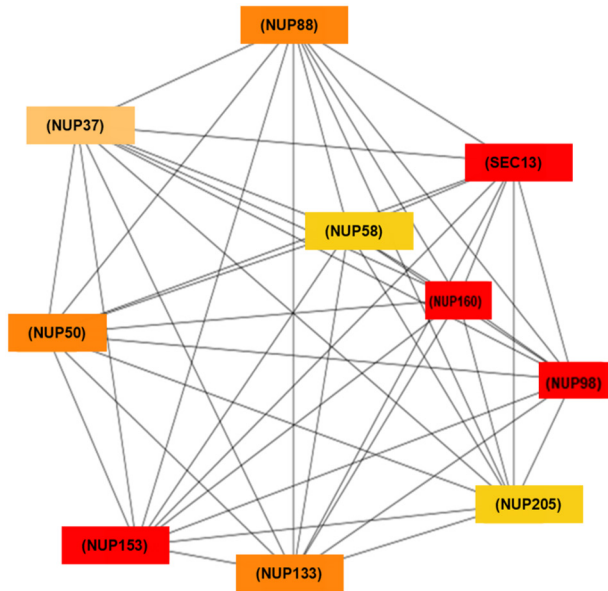


Figure S3. Kaplan-Meier overall survival plots of the top 10 hub genes in cervical squamous cell carcinoma and endocervical adenocarcinoma. Overall survival analysis performed using the Gene Expression Profiling Interactive Analysis database showed that NUP85, NUP88 and NUPL1 had a significant association with survival. NUP, nucleoporin; NUPL, NUP-like 1.

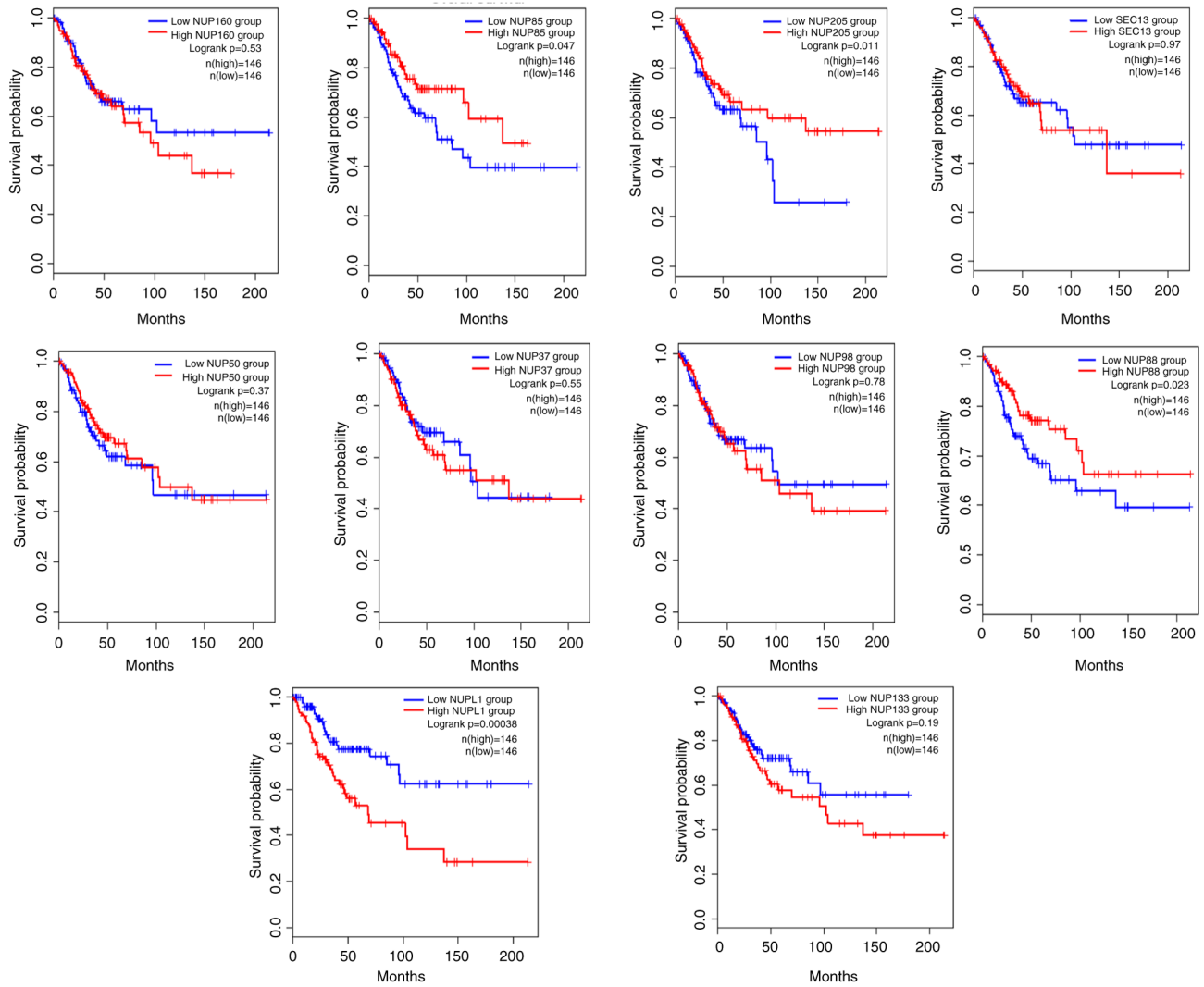


Figure S4. Data on the expression of NUP family members from the HPA. (A) Images depicting the immunohistochemical analysis of NUP50 in cervical cancer and normal cervix tissues. Cervical expression summaries for (B) NUP98 and (C) NUP160. NUP, nucleoporin; HPA, Human Protein Atlas; RNA-seq, RNA sequencing; nTPM, normalized transcripts per million; GTEx, Genotype-Tissue Expression; FANTOM5, Fifth Edition of the Functional Annotation of the Mammalian Genome.

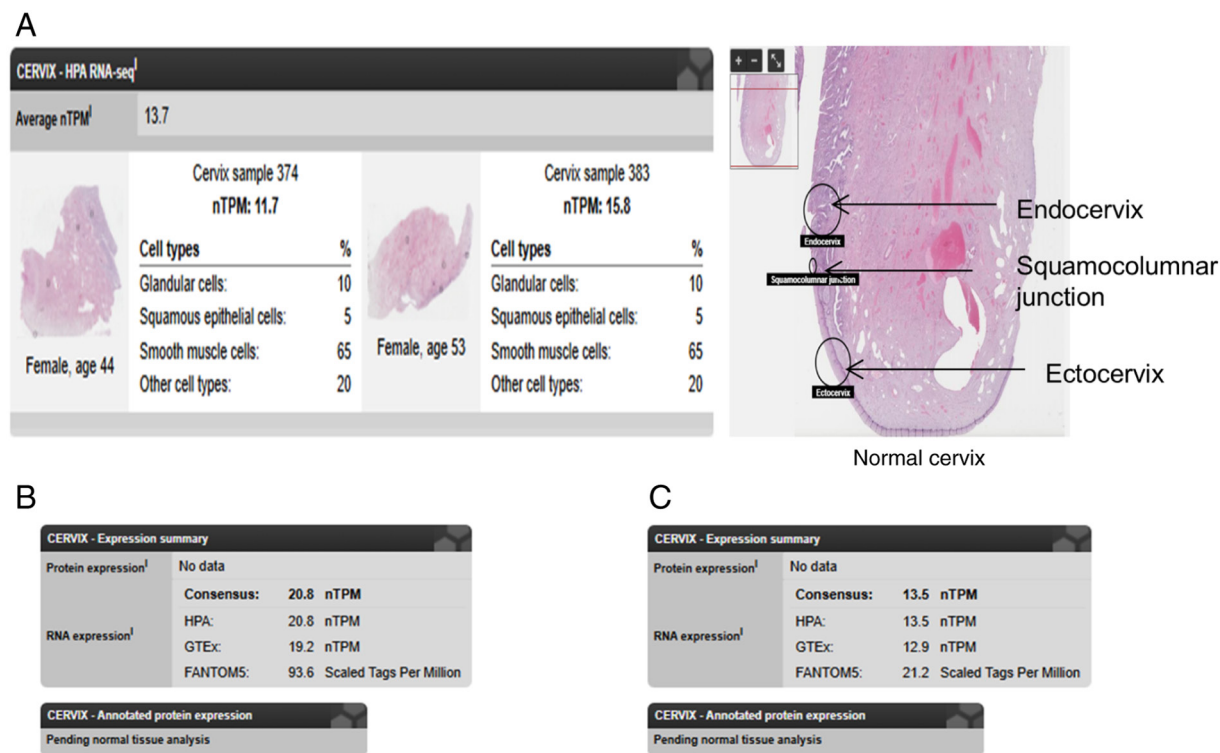


Figure S5. mRNA and protein expression analysis of distinct NUP family members in various cervical cancer cell lines (n=8): (A) NUP50, (B) NUP98 and (C) NUP160 expression data from the Human Protein Atlas. Black circles indicate the protein expression relative to the size of the circles. NUP, nucleoporin; nTPM, normalized transcripts per million.

