Supplemental Figure 1. APEX1 overexpression induces malignant potential in human immortalized fibroblast GM00637 cells. (A) Cell proliferation was measured using WST assays, and growth curves of control vector- and APEX1-transfected GM00637 cells are plotted. Total APEX1 expression levels were determined by Western blot analysis. Data represent means  $\pm$  SD of three experiments. \*\* *P* < 0.01. (B) Anchorage-independent colony formation on soft agar by control vector- and APEX1-transfected GM00737 cells. Colonies formed in soft agar were counted and photographed after 14-day incubation. Graphs and representative photographs from each condition are shown. Results are means  $\pm$  SD of three independent experiments. \*\* *P* < 0.01. (C) The wounded areas (space indicated by arrows) were examined by microscopy at the times indicated. (D) Matrigel cell migration assay of control vector- and APEX1-transfected GM00637 cells. Cells were stained with crystal violet, visualized by microscopy, and counted. Data represent the average cell numbers from five viewing fields. Error bars represent SD. \*\* *P* < 0.01.

**Supplemental Figure 2**. Analysis of APEX1, Jagged1, and cleaved Notch1 protein levels in various cancer cell lines. Western blot analysis of the levels of APEX1, Jagged1, cleaved Notch1 proteins in four gastric cancer cell lines, five lung cancer cell lines, four gliomas, and four pancreatic cancer cell lines.

Supplemental Figure 3. Analysis of Jagged1 mRNA levels in APEX1-deficient and APEX1 overexpressing colon cancer cell lines. (A) Quantitative real-time RT-PCR analysis of the level of Hes1 mRNA in APEX1 siRNA-transfected NCI-H716, DLD1, KM12SM, and KM12C cells. Results are shown as means  $\pm$  SD (n = 3). \*\* *P* < 0.01. (B) Quantitative real-time RT-PCR analysis of the level of Hes1 mRNA in APEX1 overexpressing SW480 and HT29 cells. Results are shown as means  $\pm$  SD (n = 3). \*\* *P* < 0.01.

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Vector

APEX1

С



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	Gastric ca				Lung ca					Glioma				Pancreatic ca			
	SNU638	AGS	SNU216	SNU484	DMS53	NCI-H460	NCI-H1299	Calu-1	SK-MES-1	U87	U373	M059J	M059K	PANC-1	ASPC-1	MIA PaCa-2	BXPC-3
APEX1		-	-	-		-	-		-	1	•	-	-	•	-	-	1
Jagged1		-		9		-	-				-	-			-	-	9
Notch1 active form		-	-	Ó			and the second s			Reading	_			1			11
Notch3∫ active form									_	-	-	-	-			1	
β-actin	-		-	-				-	9	•			-	•	-	<b>) (1)</b>	i



