Sup. Figure 1. (A) Summary and statistical analysis of experiments in Figure 5E with human normal ovary (n=7) and ovarian tumor tissues (n=9). Scale bar, 25  $\mu$ m (magnification, ×40)

**Sup. Figure 2.** Protein stability experiment between RDM1 and P53 in SKOV3 si*RDM1*/siN cells with Cycloheximide (CHX) treatment.

## Sup. Figure 1 Summary and statistical analysis of experiments in IHC

Α

Protein level	Samples	-	+	++	+++	Total samples
RDM1	Normal ovary	3 (42.8%)	3 (42.8%)	1 (14.3%)	0 (00.0%)	7
	Ovarian tumor	0 (0.0%)	1 (11.1%)	5 (55.6%)	3 (33.3%)	9
P53	Normal ovary	0 (00.0%)	0 (00.0%)	4 (57.1%)	3 (42.8%)	7
	Ovarian tumor	1 (11.1%)	2 (22.2%)	2 (22.2%)	4 (66.7%)	9
RAD51	Normal ovary	2 (28.6%)	3 (42.8%)	1 (14.3%)	1 (14.3%)	7
	Ovarian tumor	1 (11.1%)	1 (11.1%)	4 (66.7%)	3 (33.3%)	9
RAD52	Normal ovary	3 (42.8%)	3 (42.8%)	1 (14.3%)	0 (00.0%)	7
	Ovarian tumor	0 (00.0%)	2 (22.2%)	4 (66.7%)	3 (33.3%)	9

## Sup. Figure 2

