

Supplementary table 1. Summary of the antibodies used in this study.

Antibody	Manufacturer	Catalog No.	Source	Dilution for IF	Dilution for IP	Dilution for western blot
Anti-SUMO1	Abcam (Cambridge, MA)	ab32058	Rabbit	1:100	-	1:500
Anti-SUMO2/3	Abcam	ab3742	Rabbit	1:100	-	1:500
Anti-MDC1	Abcam	ab41951	Rabbit	1:100	1:100	1:1000
Anti-STK31	GeneTex (Irvine, CA)	GTX119718	Rabbit	1:100	1:250	1:1000
Anti-Mili/PiwiL2	Active Motif (Carlsbad, CA)	61144	Mouse	1:100	1:100	1:500
Anti-CDK1	Santa Cruz (Dallas, TX)	sc-54	Mouse	1:50	1:50	1:100
Anti-RNAP II (A-10)	Santa Cruz	sc-17798	Mouse	1:50	1:10	1:200
Anti-RNAP II (N-20)	Santa Cruz	sc-899	Rabbit	1:50	1:10	1:200
Anti-DDX4	Cell Signaling (Beverly, MA)	8761S	Rabbit	1:200	1:100	1:1000
Anti-cdc5L	Fitzgerald (Acton, MA)	10R-1324	Mouse	1:5	1:10	1:50
Anti-KAP1	Abcam	ab22553	Mouse	1:250	1:250	1:1000
Alexa Fluor® 488 donkey anti-rat IgG	Life Technologies (Grand Island, NY)	A21208	Donkey	1:100	-	-
Alexa Fluor® 488 goat anti-mouse IgG	Life Technologies (A11001	Goat	1:100	-	-
Alexa Fluor® 488 goat anti-rabbit IgG	Life Technologies)	A11008	Goat	1:100	-	-
Texas red anti-mouse IgG	Vector Laboratories (Burlingame, CA)	TI-2000	Horse	1:100	-	-
Texas red anti-rabbit IgG	Vector Laboratories	TI-1000	Goat	1:100	-	-
Anti-SUMO1	Santa Cruz	sc-5308 AC Agarose conjugate	Mouse	-	1:5	-
mouse IgG	GenScript (Piscataway, NJ)	A01007	Mouse	-	1:1000	-
rabbit IgG	GenScript	A01008	Rabbit	-	1:1000	-
Anti-actin	Santa Cruz	sc-1615	Goat	-	-	1:1000
ECL™ anti-rabbit IgG HRP linked	GE Healthcare UK Limited (Little Chalfont, Buckinghamshire, UK)	NA934V	Donkey	-	-	1:5000
Goat anti-mouse IgG (H + L) HRP	Millipore	AP308P	Goat	-	-	1:5000
Goat anti-rat IgG-HRP	Santa Cruz	sc-2032	Goat	-	-	1:5000
Donkey anti-goat IgG-HRP	Santa Cruz	sc-2020	Donkey	-	-	1:5000