Supplementary Table 1

A

| | Gene | % frequency | |
		Mutation	Het Loss
A subunit	PPP2R1A	1.01	49.3
	PPP2R1B	0.25	31.9
C subunit	PPP2CA	0.25	41.9
	PPP2CB	0	54.0
B subunit	PPP2R2A	0.5	60.0
	PPP2R2B	0.5	35.4
	PPP2R2C	0.5	45.2
	PPP2R2D	0.25	34.7
	PPP2R5A	0.25	16.1
	PPP2R5B	0.5	18.1
	PPP2R5C	0.25	38.2
	PPP2R5D	0.25	19.9
	PPP2R5E	0.25	52.0
	PPP2R3A	0.75	4.0
	PPP2R3B	0	56.8
	PPP2R3C	0	35.9
	STRN	0.25	9.6
	STRN3	0.25	35.9
	STRN4	0.25	49.5

B

Gene A	Gene B	Neither	A Not B	B Not A	Both	Log2 Odds Ratio	p-Value	q-Value	Tendency
PPP2CA	PPP2R2B	160	24	13	119	>3	<0.001	<0.001	Co-occurrence
PPP2CB	PPP2R2A	101	9	35	171	>3	<0.001	<0.001	Co-occurrence
PPP2R5C	PPP2R5E	125	22	62	107	>3	<0.001	<0.001	Co-occurrence
PPP2R1B	PPP2R5B	201	55	18	42	>3	<0.001	<0.001	Co-occurrence
PPP2R1A	PPP2R5C	109	78	45	84	1.383	<0.001	<0.001	Co-occurrence
PPP2R2D	PPP2R5C	135	52	69	60	1.175	<0.001	0.009	Co-occurrence
PPP2R2D	PPP2R5E	107	40	97	72	0.99	0.003	0.045	Co-occurrence
PPP2CA	PPP2R2A	72	38	101	105	0.978	0.004	0.047	Co-occurrence

Supplementary Table 1 – **PP2A genes alteration and co-occurrence frequencies in HGSC**. A) Mutation or Het Loss percentage frequency for each one of the PP2A scaffolding (A), catalytic (C) and regulatory (B) subunits according to TCGA. Data adapted from cBioPortal. B) Mutual exclusivity analysis comparing Gene A and B expression looking at number of patients that have neither gene, A but not B, B but not A or both genes expressed. Statistical analysis extracted from cBioPortal, utilizing p- value (derived from one-side Fisher Exact Test) and q-value (derived from Benjamini-Hochberg FDR correction) and expected tendency.