








































Table S2. Marketing centrality motifs, cancer genes and their motif types.

Rank ^a	Marketing centrality motif	Cancer genes	Motif type ^b
1	m3763	CREB1, AKT1	 Multiple inputs
2	m3296	CREB1, AKT1	 Multiple inputs
3	m2276	CREB1, AKT1	 Multiple inputs
4	m2573	PIK3CA, PIK3R1, AKT1	 Multiple inputs
5	m2564	PIK3CA, PIK3R1, AKT1	 Multiple inputs
6	m3925	CREB1, AKT1	 Multiple inputs
7	m4089	PIK3CA, PIK3R1, AKT1	 Feed forward loop
8	m2566	PIK3CA, PIK3R1, AKT1	 Multiple inputs
9	m2568	PIK3CA, PIK3R1, AKT1	 Multiple inputs
10	m3748	BCL2, AKT1	 Multiple inputs
11	m2557	PIK3CA, PIK3R1, AKT1	 Multiple inputs
12	m2561	PIK3CA, PIK3R1, AKT1	 Multiple inputs
13	m2569	PIK3CA, PIK3R1, AKT1	 Multiple inputs
14	m2556	PIK3CA, PIK3R1, AKT1	 Multiple inputs
15	m2572	PIK3CA, PIK3R1, AKT1	 Multiple inputs
16	m4195	PIK3CA, PIK3R1, AKT1	 Single input
17	m2554	PIK3CA, PIK3R1, AKT1	 Multiple inputs
18	m2555	PIK3CA, PIK3R1, AKT1	 Multiple inputs
19	m848	AKT1	 Feed forward loop
20	m3760	MYC, AKT1	 Multiple inputs
21	m2558	PIK3CA, PIK3R1, AKT1	 Multiple inputs
22	m2571	PIK3CA, PIK3R1, AKT1	 Multiple inputs
23	m2570	PIK3CA, PIK3R1, AKT1	 Multiple inputs
24	m2559	PIK3CA, PIK3R1, AKT1	 Multiple inputs
25	m2560	PIK3CA, PIK3R1, AKT1	 Multiple inputs
26	m2562	PIK3CA, PIK3R1, AKT1	 Multiple inputs
27	m2776	PIK3CA, PIK3R1, AKT1	 Multiple inputs
28	m2563	PIK3CA, PIK3R1, AKT1	 Multiple inputs
29	m2565	PIK3CA, PIK3R1, AKT1	 Multiple inputs
30	m2567	PIK3CA, PIK3R1, AKT1	 Multiple inputs
31	m3857	PIK3CA, PIK3R1, AKT1	 Multiple inputs
32	m4096	RAF1, AKT1	 Feed forward loop

33	m3921	CREB1, AKT1		Multiple inputs
34	m3859	PIK3CA, PIK3R1, AKT1		Multiple inputs
35	m3927	CREB1, AKT1		Multiple inputs
36	m3928	CREB1, AKT1		Multiple inputs
37	m3316	CREB1, AKT1		Multiple inputs
38	m3425	CREB1, AKT1		Multiple inputs
39	m3569	CREB1, AKT1		Multiple inputs

^a The marketing centrality motifs are ranked based on the sum of rank in each ranked list Ns_i .

^b The vertices containing cancer genes are represented in green, and others are represented in black. The two kinds of edges are represented by black (output) and green (activation) edges, respectively.