

Fig. S1

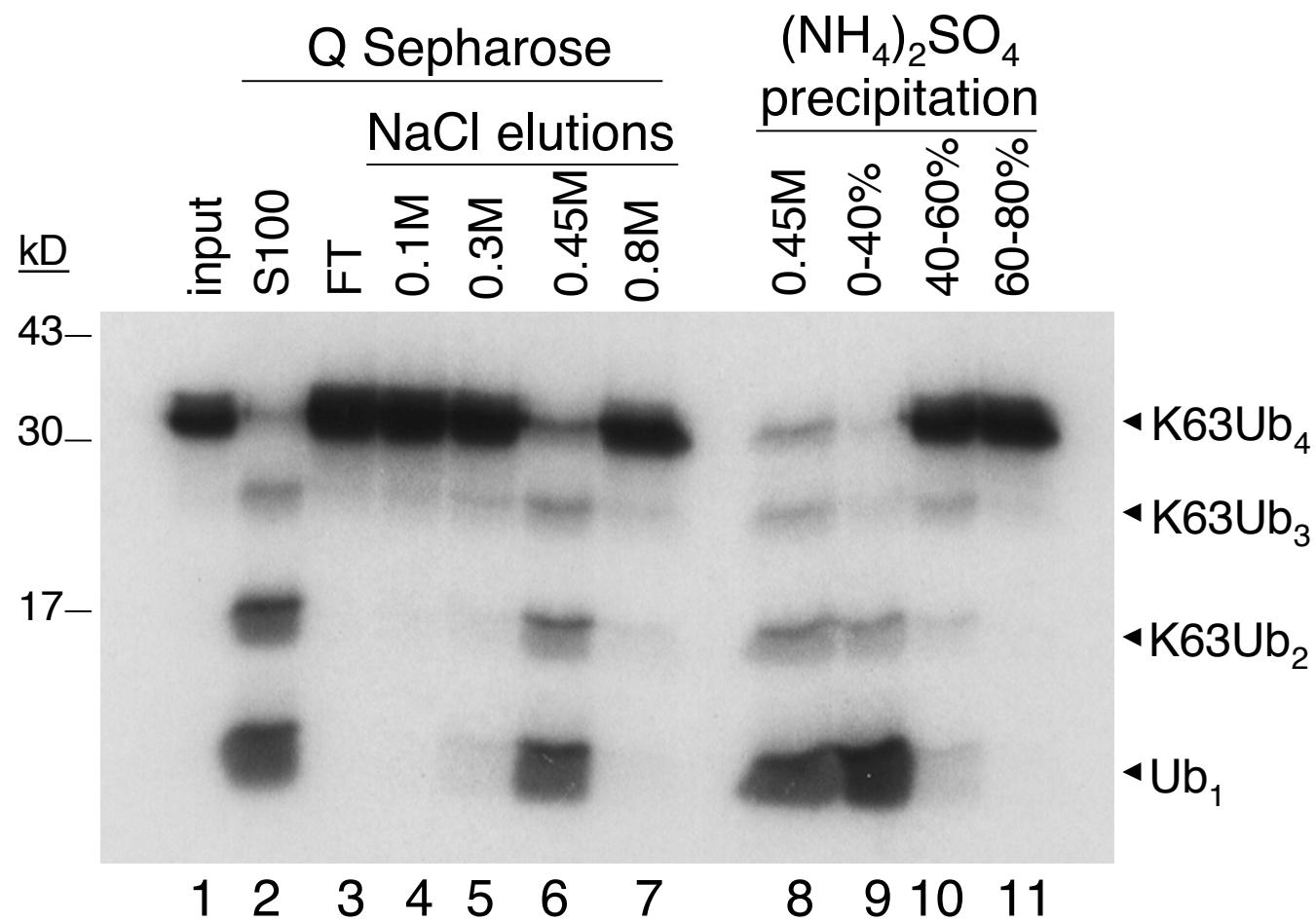
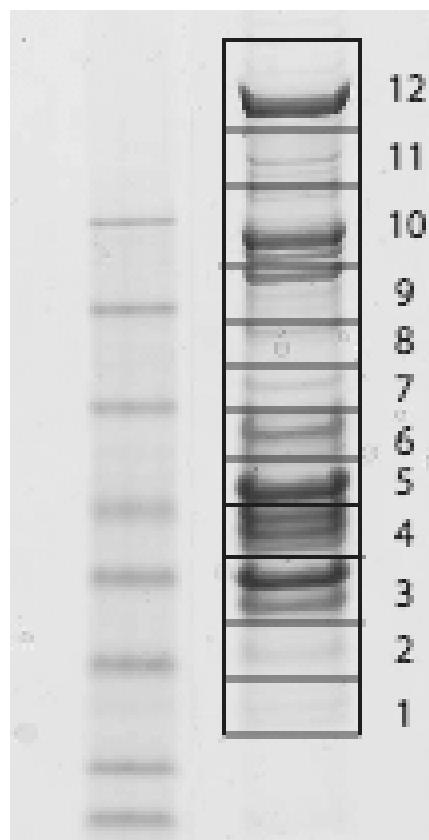


Fig. S2.



Protein	# peptides	Gel slice	Mass
Proteasome			
proteasomal ATPase-associated factor 1	2	4	43132
proteasome 26S ATPase subunit 1	2	7	49325
proteasome 26S ATPase subunit 2	9	6	49002
proteasome 26S ATPase subunit 3	5	6	49458
proteasome 26S ATPase subunit 4	1	6	47451
proteasome 26S ATPase subunit 5	6	6	45768
proteasome 26S non-ATPase subunit 1	11	9	106795
proteasome 26S non-ATPase subunit 2	8	10	100877
proteasome 26S non-ATPase subunit 3	13	8	61054
proteasome 26S non-ATPase subunit 5	6	6	56560
proteasome (prosome, macropain) 26S subunit, non-ATPase, 6	3	7	45787
proteasome 26S non-ATPase subunit 7	5	7	37060
proteasome 26S non-ATPase subunit 10	1	1	24697
proteasome 26S non-ATPase subunit 11	3	5	47719
proteasome 26S non-ATPase subunit 12	7	8	53270
26 proteasome-associated pad1 homolog	N/A	3	34446
HECT, UBA and WWE domain containing 1	6	11	294370
ubiquitin specific protease 9, Y-linked	28	12	292851
proteasome alpha 7 subunit	2	2	28041
COP9 signalosome			
Damage-specific DNA binding protein 1	1	10	128162
COP9 constitutive photomorphogenic homolog subunit 2	4	6	51849
COP9 constitutive photomorphogenic homolog subunit 3	20	5	48412
COP9 signalosome subunit 4	14	5	46525
COP9 signalosome subunit 5	9	4	37783
COP9 signalosome subunit 6	5	4	36482
COP9 complex subunit 7a	5	2	30429
COP9 constitutive photomorphogenic homolog subunit 7B	2	3	29889
COP9 signalosome subunit 8	3	1	23268
BRISC			
BRCA1/BRCA2-containing complex, subunit 3 (Brcc36)	18	3	35941
brain and reproductive organ-expressed (TNFRSF1A modulator, BRE)	14	5	46844
hypothetical protein LOC23172 (Abro1)	N/A	4	46770
hypothetical protein LOC29086 (HSPC412)	26	4	36429

Fig. S3 Uch37 is present in the PA700 complex

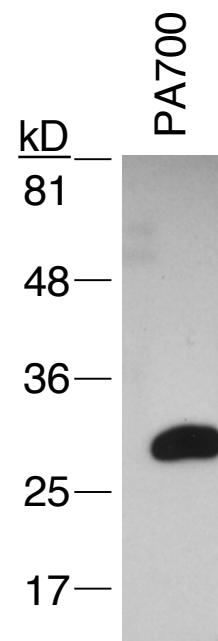


Fig. S4.

**A. Brcc36-FLAG-HA
BRISC complex**

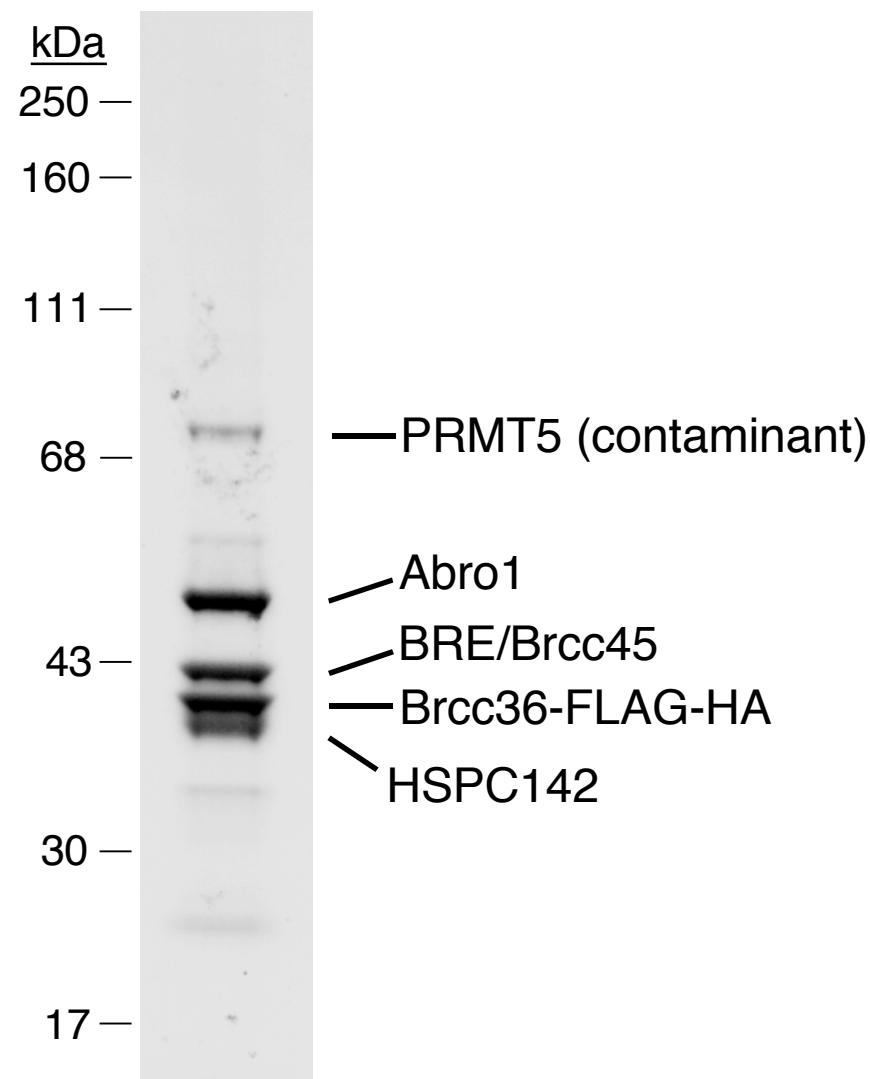


Fig. S5

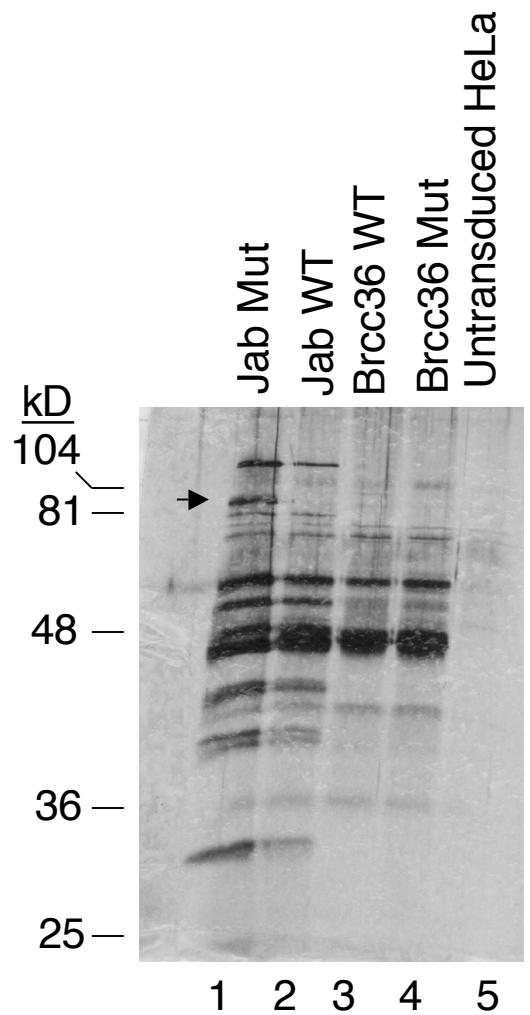
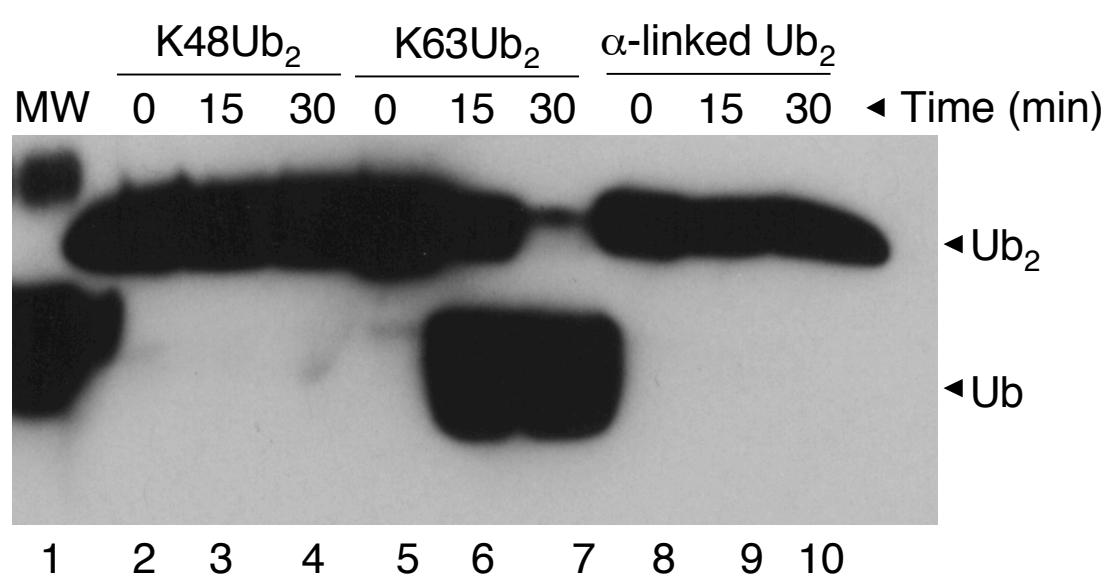


Fig. S6.

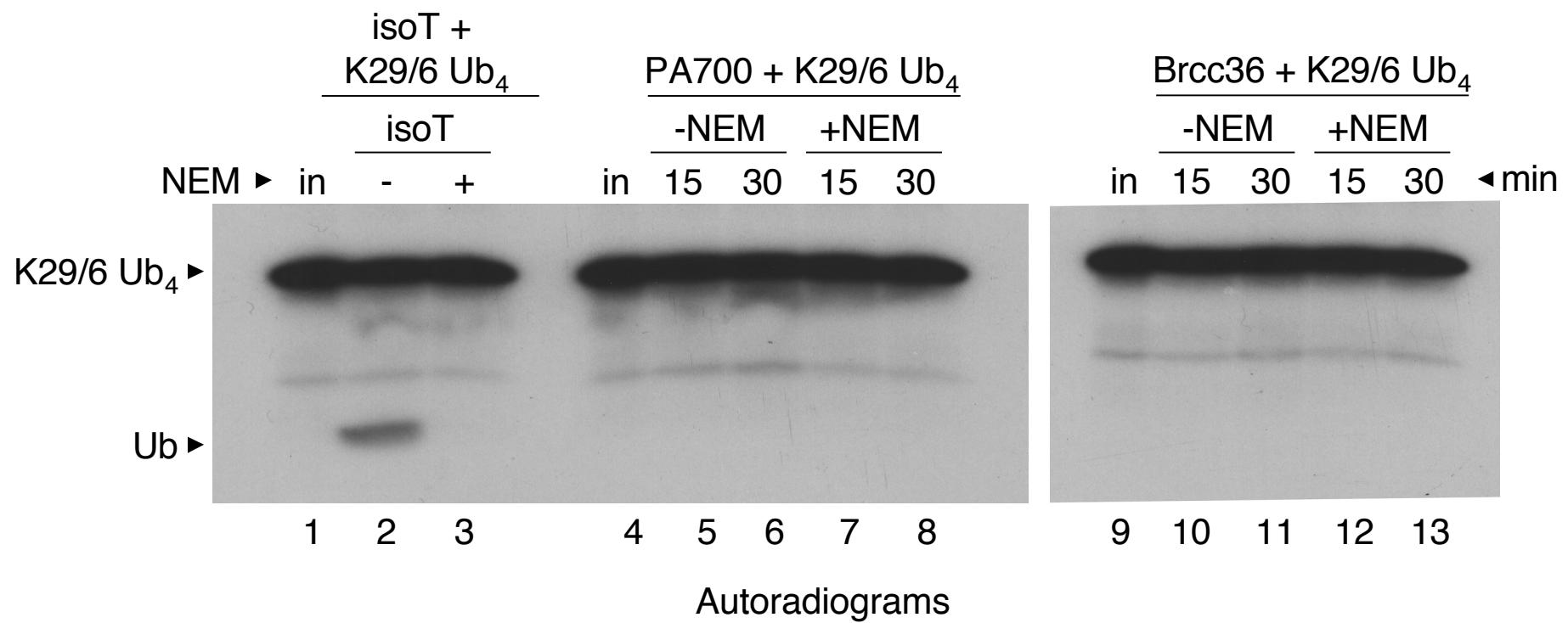
A.

BRISC DUB assays



Anti-Ub immunoblot

B.



C.

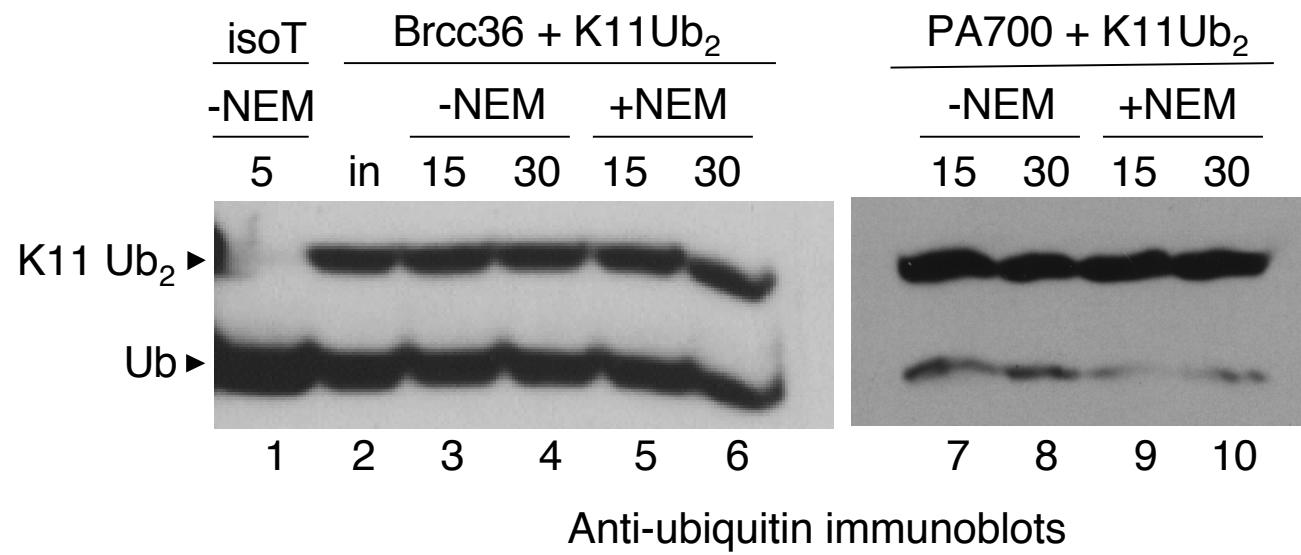
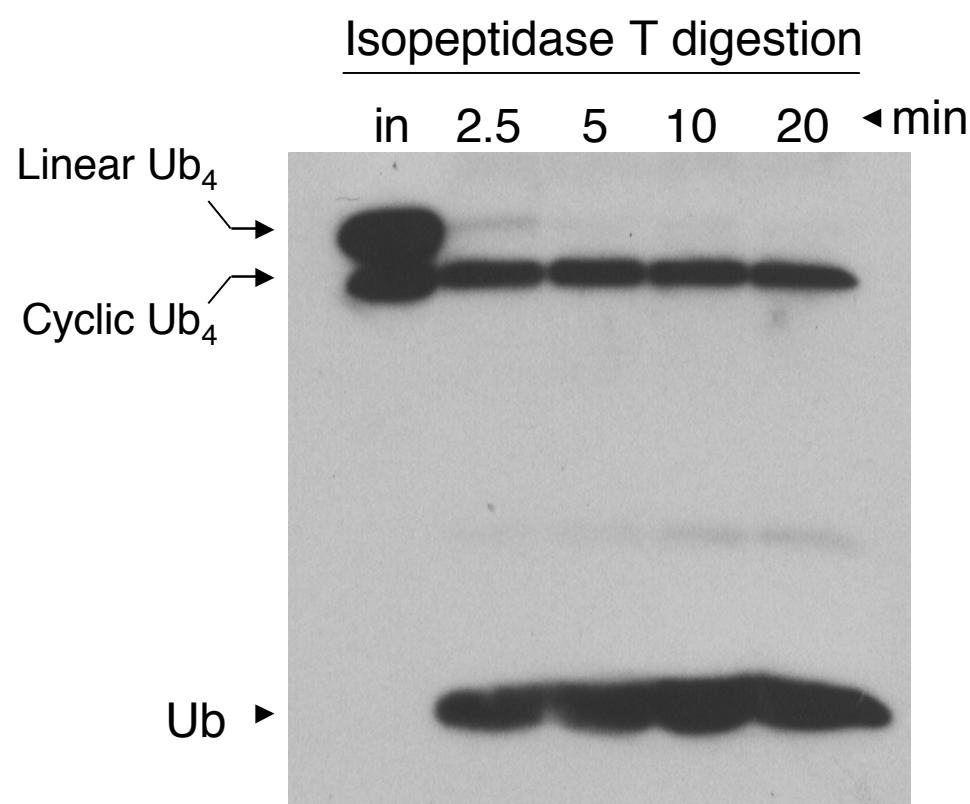
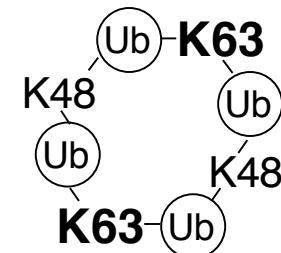


Fig. S7.



Cyclic Ub₄



Linear Ub₄

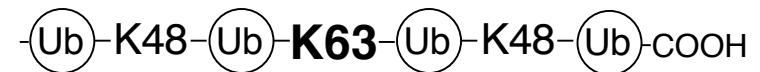


Fig. S8

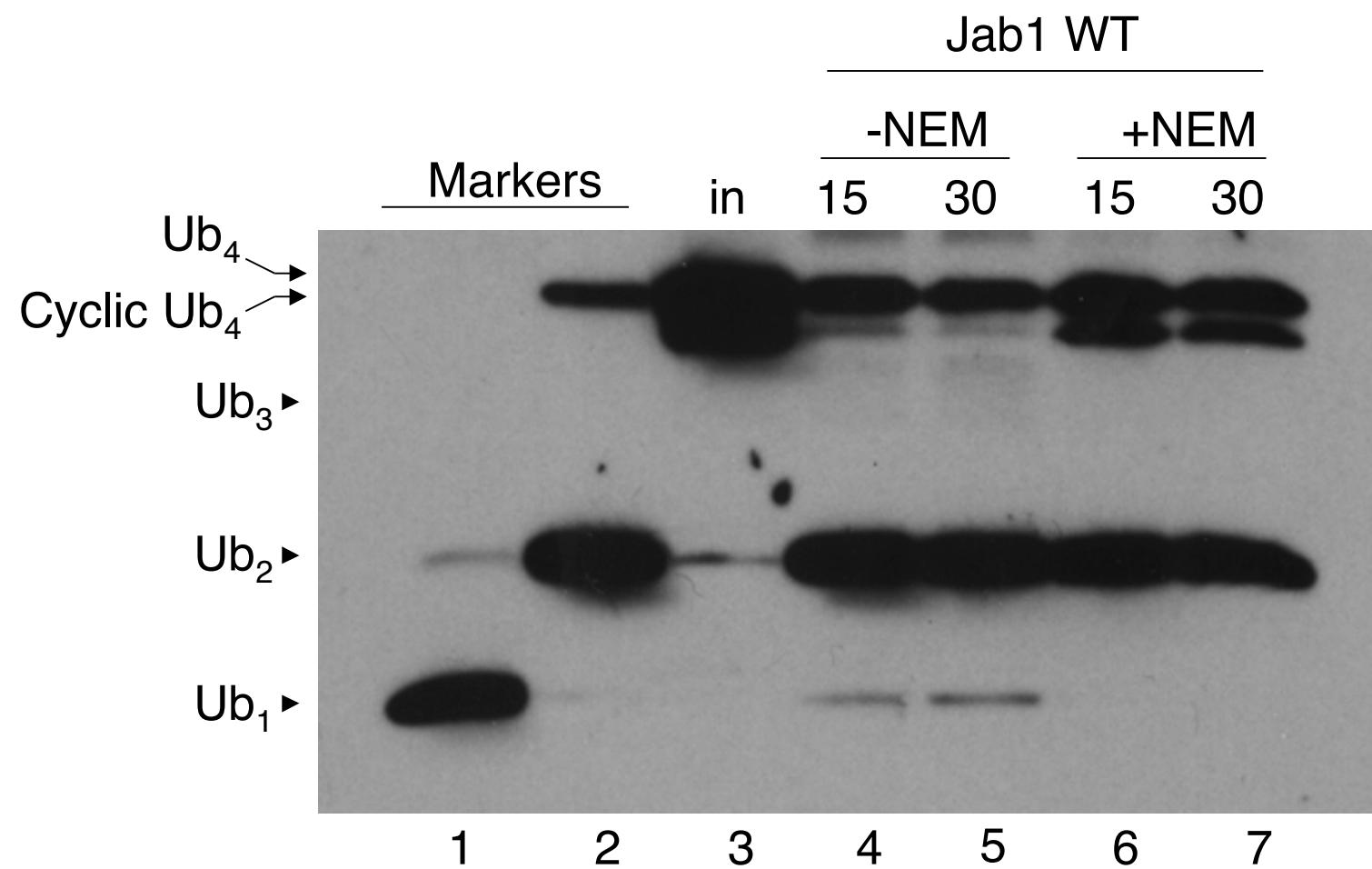


Fig. S9

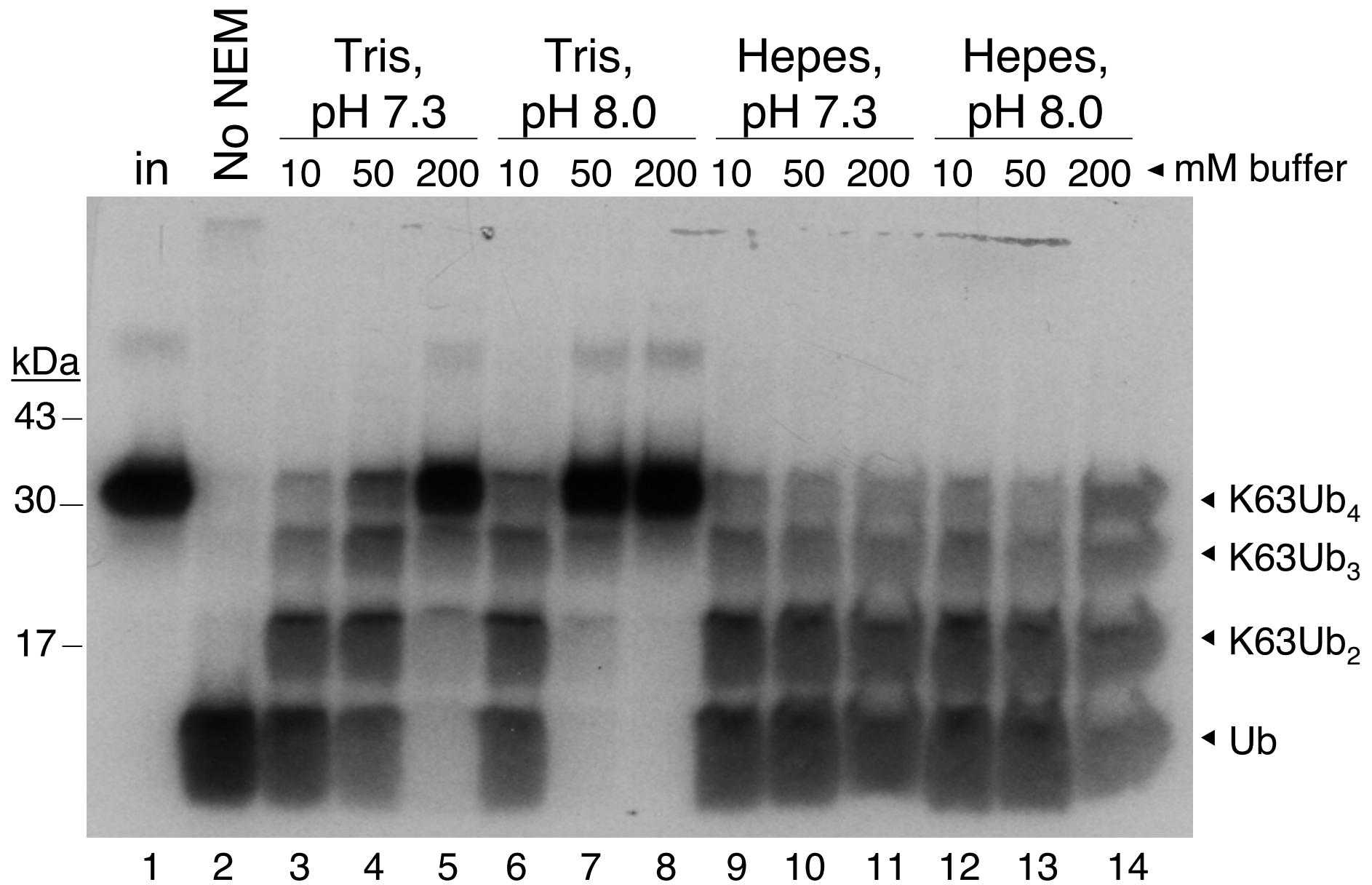


Fig. S10

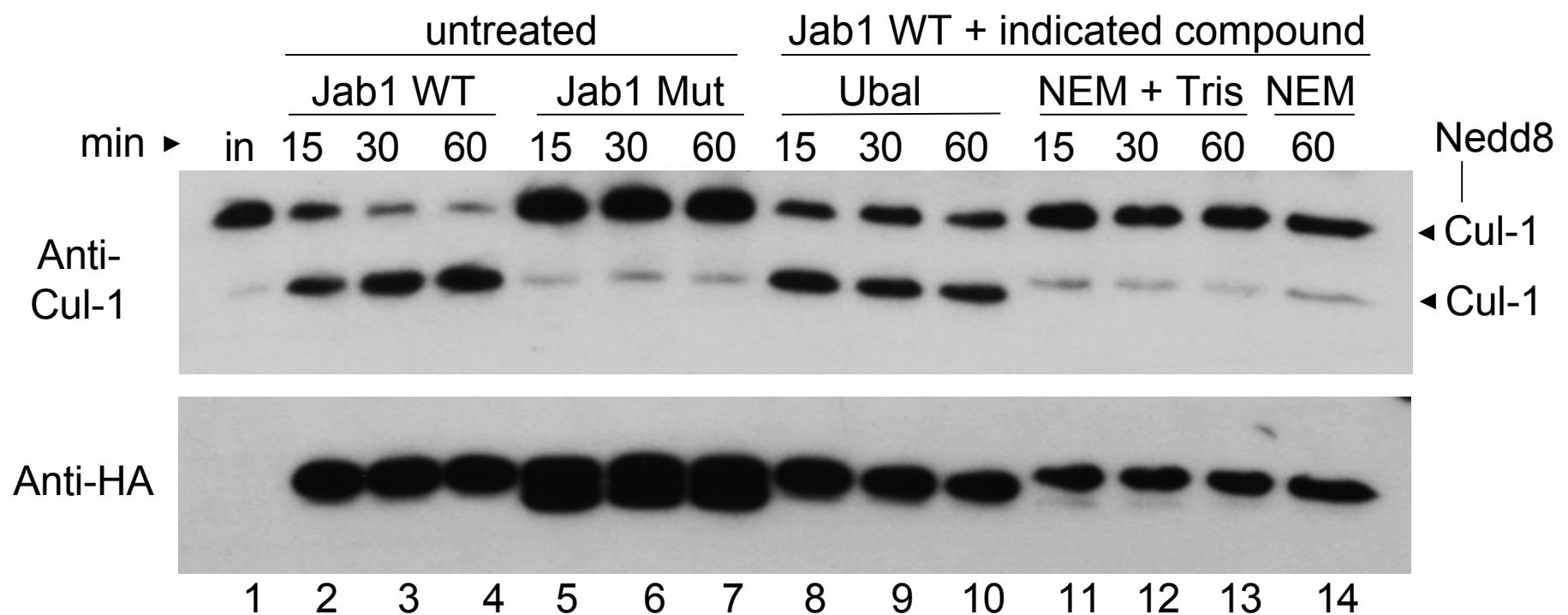


Fig. S11

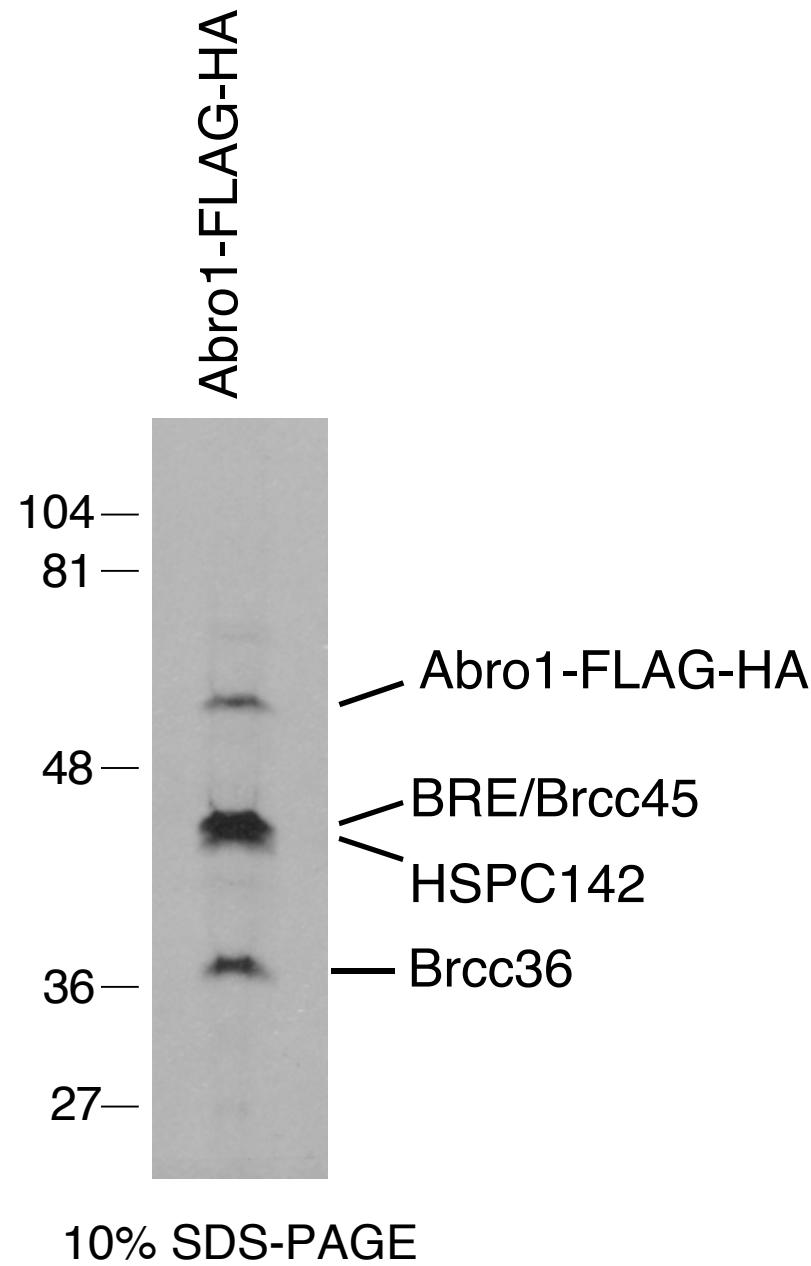


Fig. S12

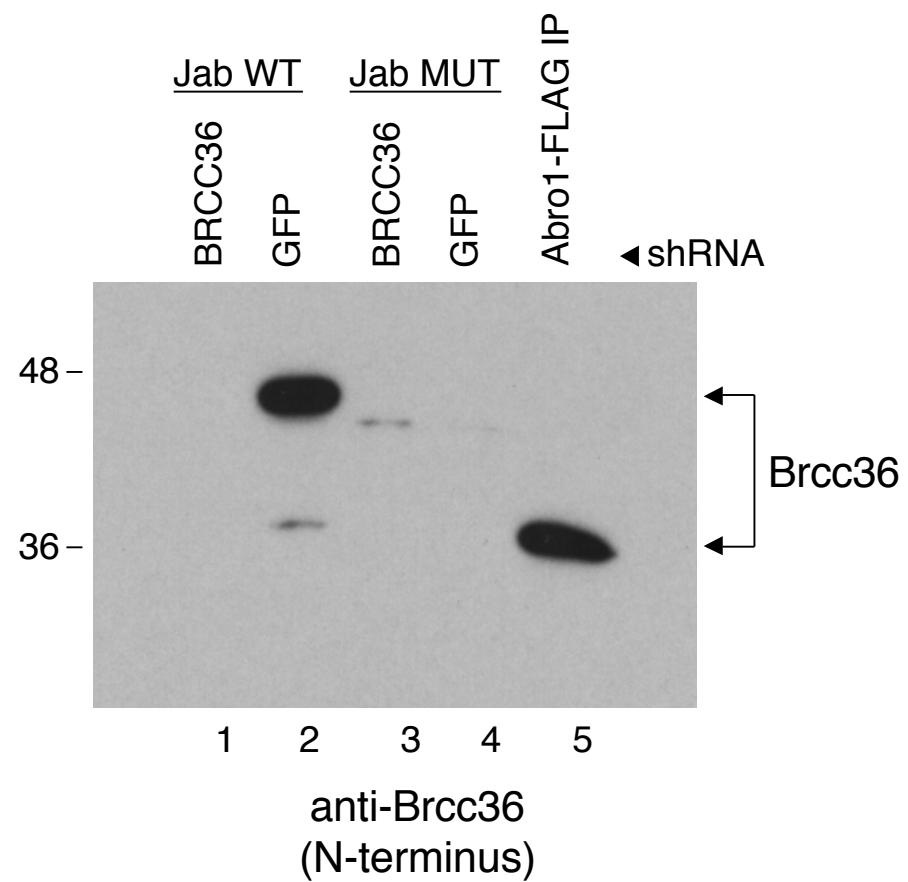


Fig. S13

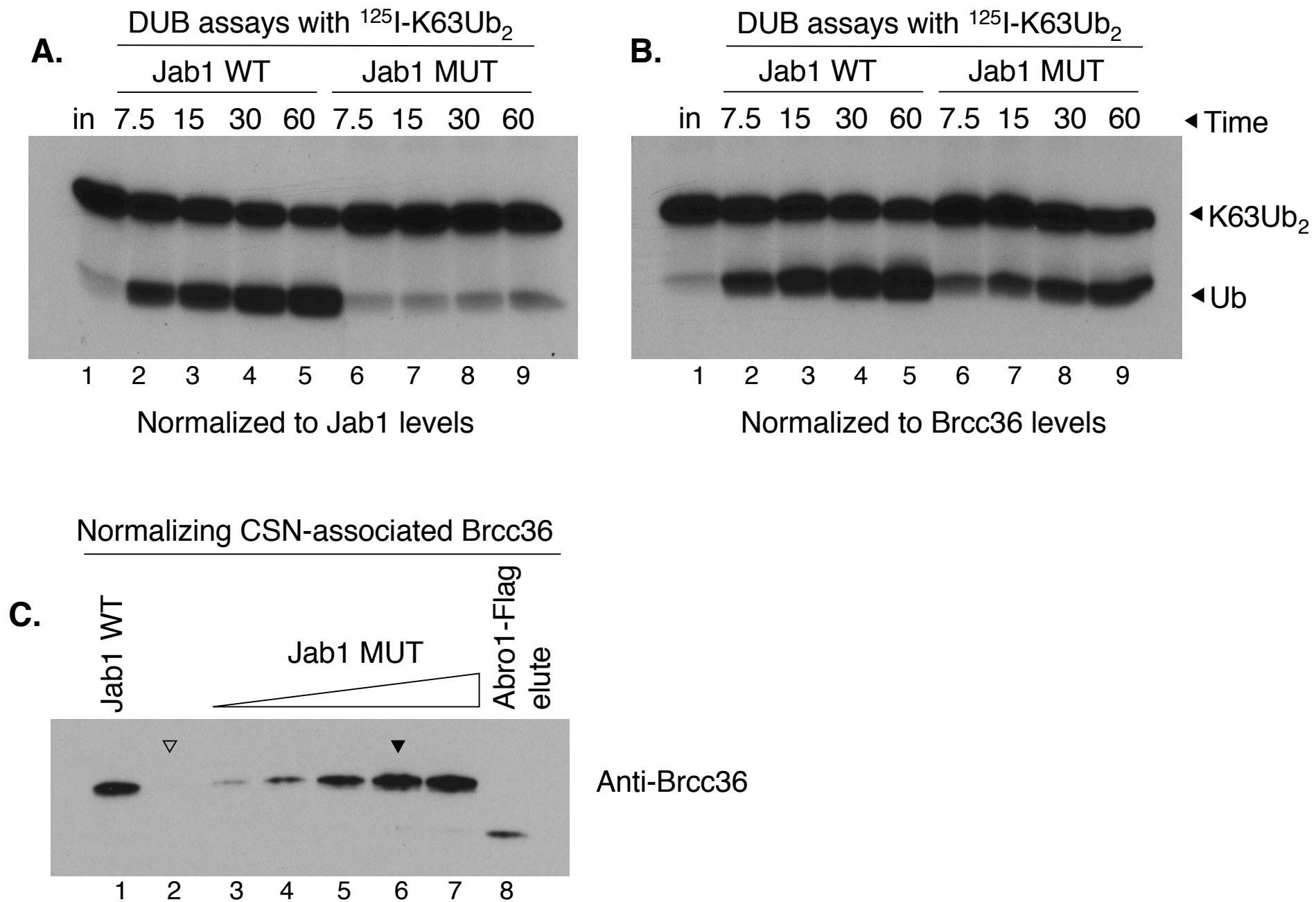


Fig. S14

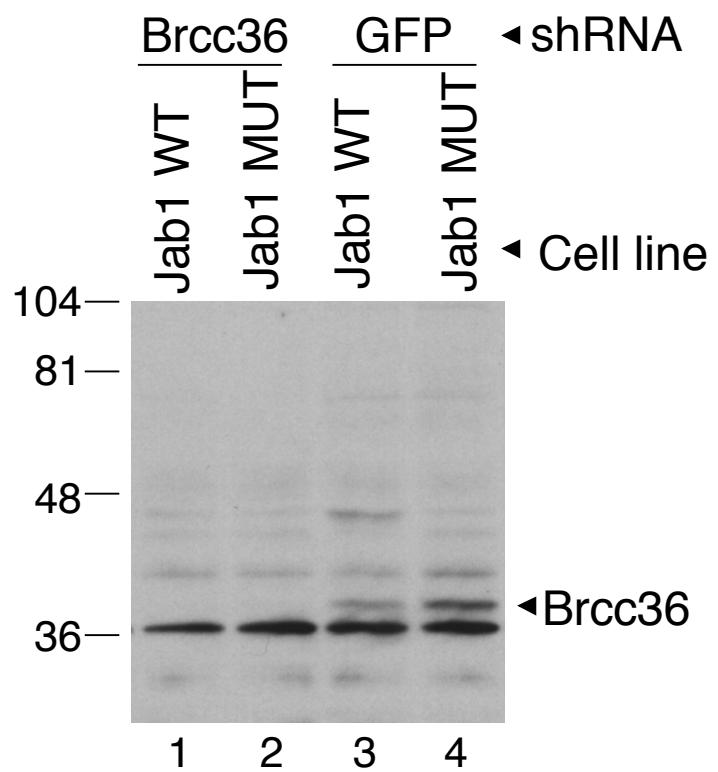


Fig. S15

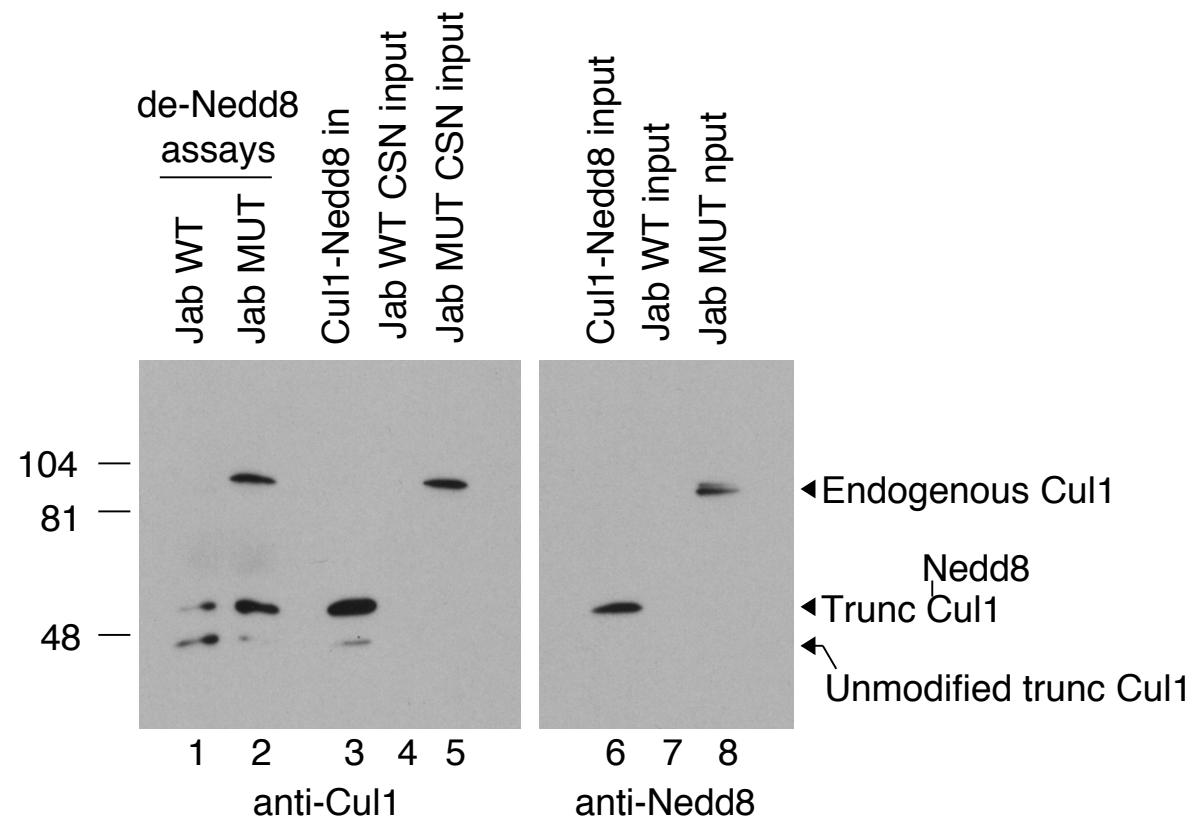


Fig. S16

