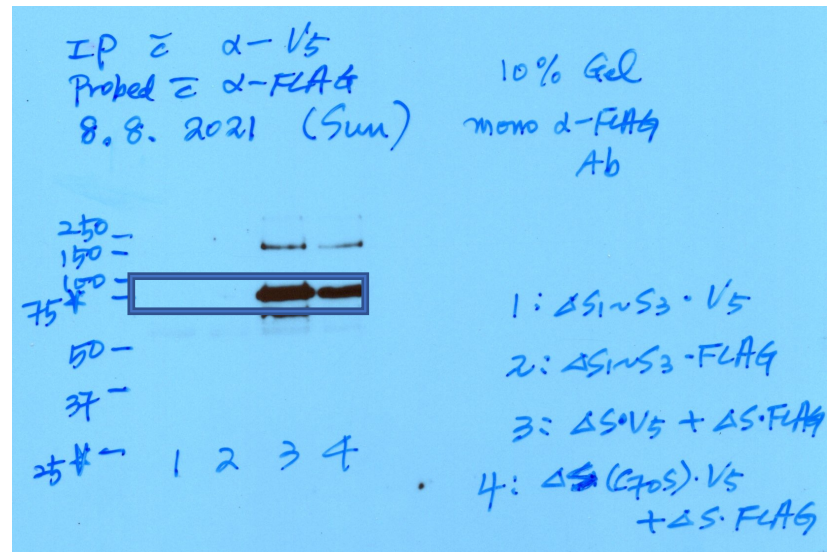
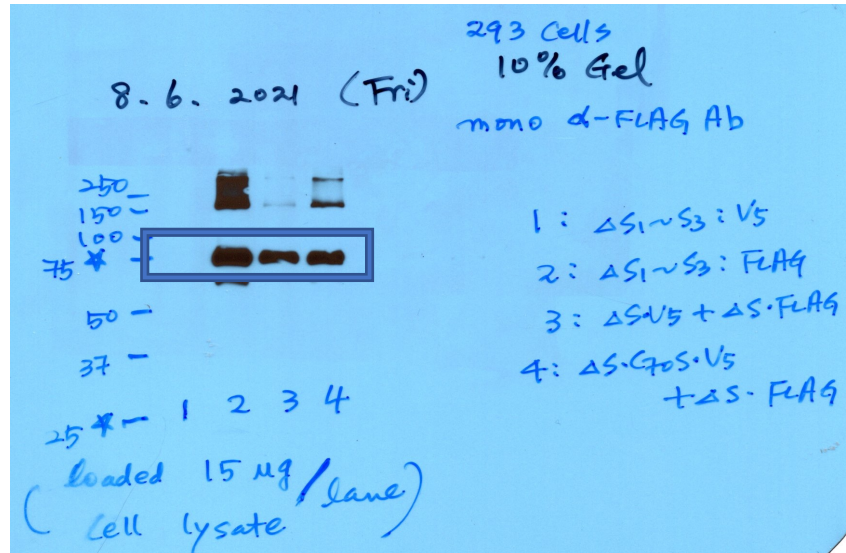


Extended Data Fig. 5 b



Extended Data Fig. 5 c

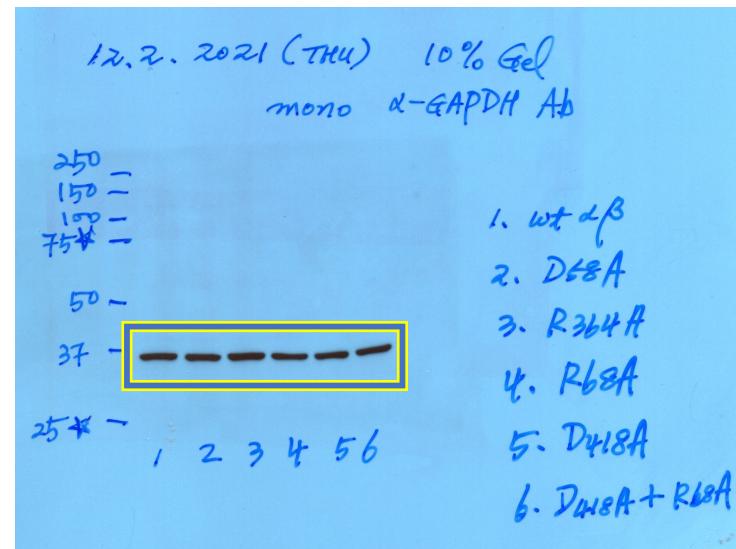
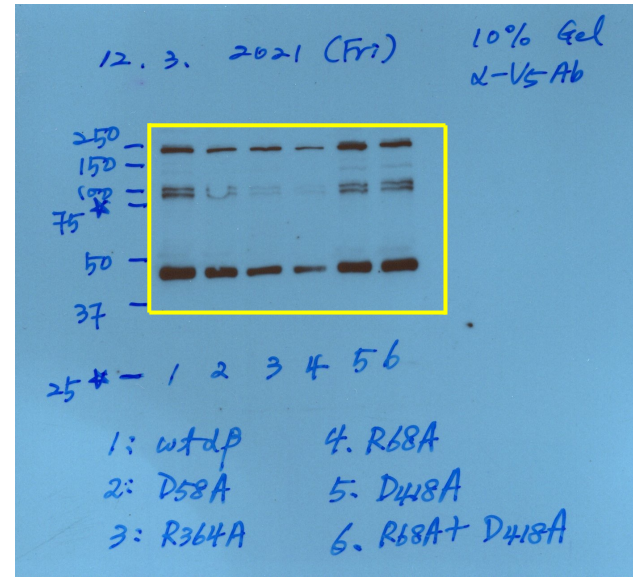
293 cells
37°C X 1 hr reaction

	6.21.2021		(5ug used)
	cpm		cpm
Mock	3677		
delS1-S3	112100	-3677	108423
delS1-S3+C70S	43476	-3677	39799
	6.24.2021		(50ug Used)
	cpm		cpm
Mock	3382		
delS1-S3	564940	-3382	561688
delS1-S3+C70S	384870	-3382	381488

To get specific activity:
118 cpm/pmol

	6.21	6.24		pmol/μg/hr	
				Ave	StDev
delS1-S3	183.77	95.18		139.475	62.6425897
delS1-S3+C70S	67.36	64.66		66.01	1.90918831

Extended Data Fig. 5 e



Extended Data Fig. 5 f

HeLa α, β $-/-$ cells

37°C X 2.5 hrs reaction				37°C X 3 hrs reaction				37°C X 3 hrs reaction			
	12.1.2021		(50ug used)		12.2.2021		(50ug used)		12.3.2021		(50ug used)
	cpm				cpm				cpm		
Mock	6277			Mock	6515	-6515	0	Mock	6515	-6515	0
WT	14658	-6277	8381	WT	16918	-6515	10403	WT	15533	-6515	9018
R364A	9399	-6277	3122	R364A	10674	-6515	4159	R364A	11353	-6515	4838
D58A	8929	-6277	2652	D58A	10211	-6515	3696	D58A	9279	-6515	2764
D418+R68				D418+R68				D418+R68			
A	6868	-6277	591	A	7492	-6515	977	A	7996	-6515	1481
R68A	10417	-6277	4140	R68A	9961	-6515	3446	R68A	12231	-6515	5716
D418A	9667	-6277	3390	D418A	12984	-6515	6469	D418A	11912	-6515	5397

For the blank value of 12.2 & 12.3 Data, 6515 cpm (average value from 3 times exp ; 7209, 6110, 6226 cpm) was used.

To get specific activity:
118 cpm/pmol

pmol/ μ g/hr

	12.01.2021	12.02.2021	12.03.2021	AVE	STDEV
WT	0.57	0.59	0.51	0.55666667	0.04163332
R364A	0.21	0.23	0.27	0.23666667	0.0305505
D58A	0.18	0.21	0.16	0.18333333	0.02
D418+R68A	0.04	0.06	0.08	0.06	0.02
R68A	0.28	0.19	0.32	0.26333333	0.07
D418A	0.23	0.37	0.3	0.3	0.07