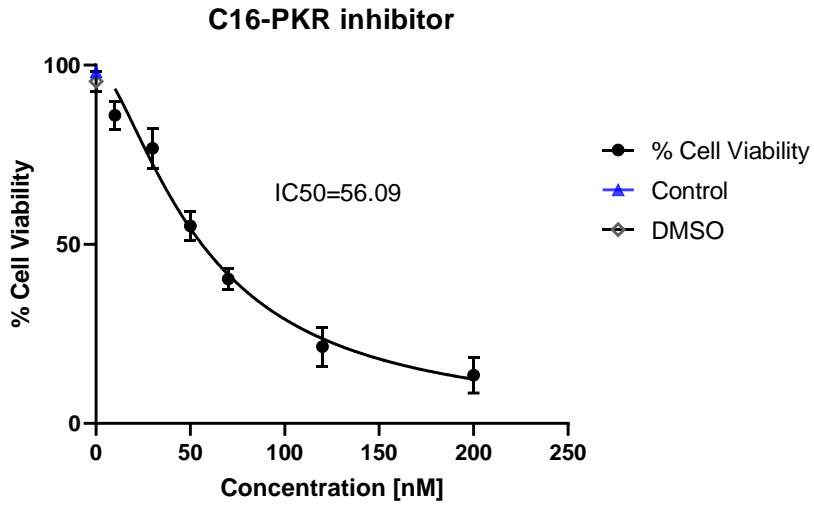
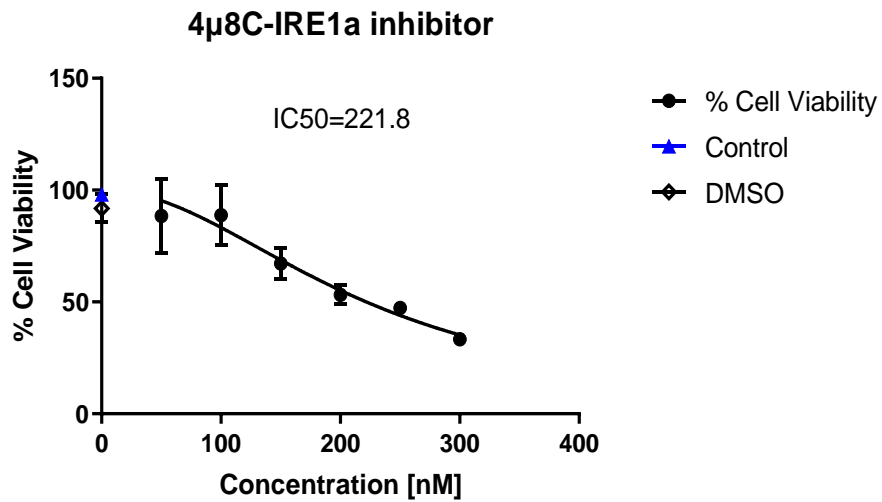


A.



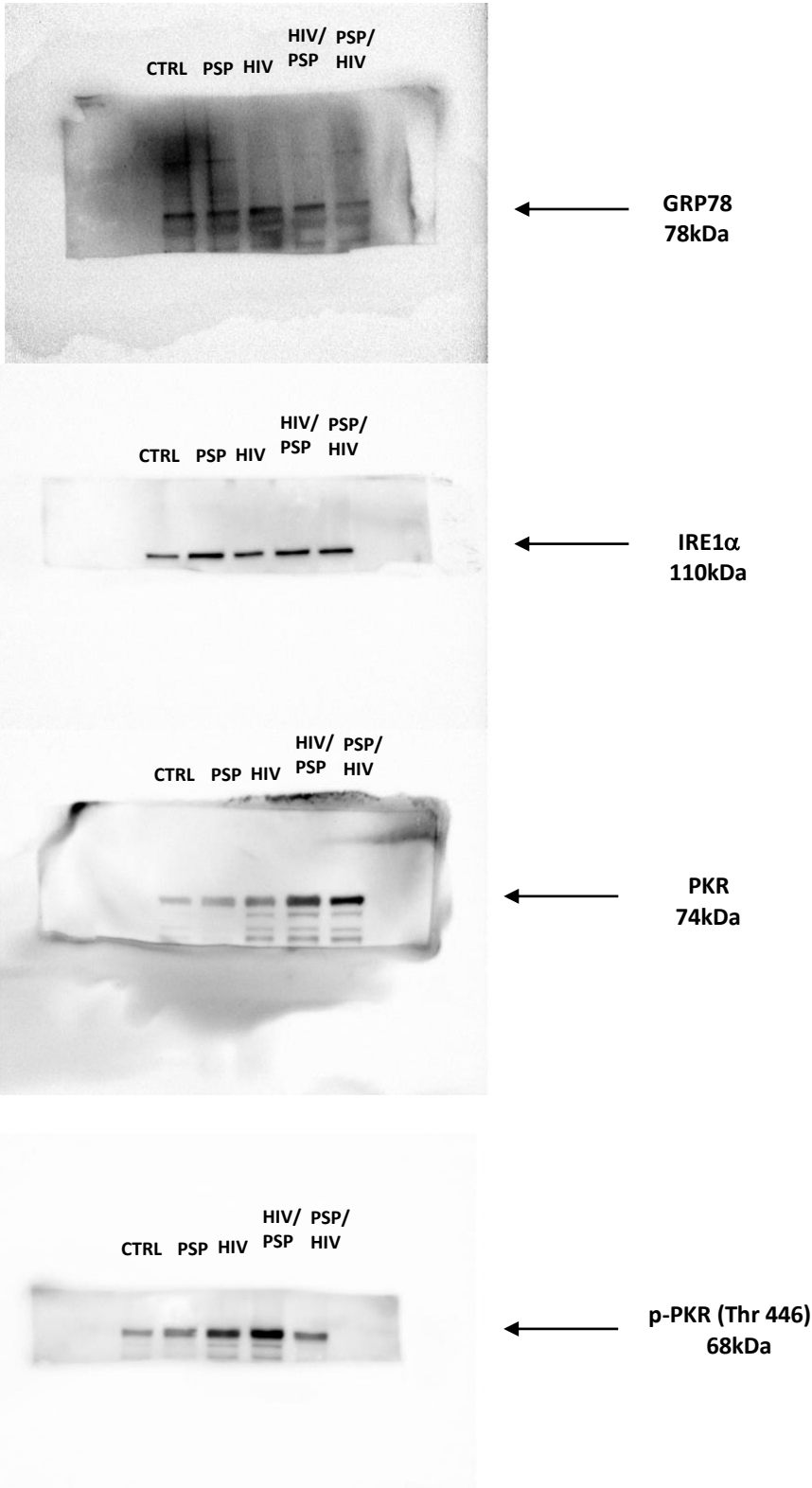
B.



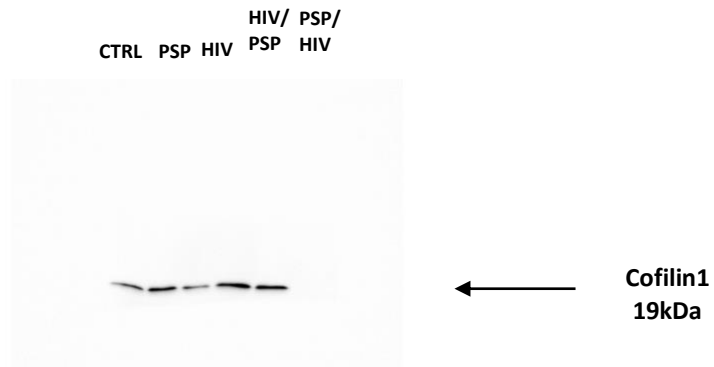
**Figure S1.** MTT assays for detection of IC<sub>50</sub> of pharmacological drugs used. The concentration that induced 50% cell viability in THP1 cells were determined for (A). C16 (IC<sub>50</sub> = 56.09nM) and (B) 4 $\mu$ 8C (IC<sub>50</sub> = 221.8nM). Experiments were carried out in biological triplicates,  $n=3$ .

**Figure S2:** Full, original, uncropped, representative western blot images within manuscript

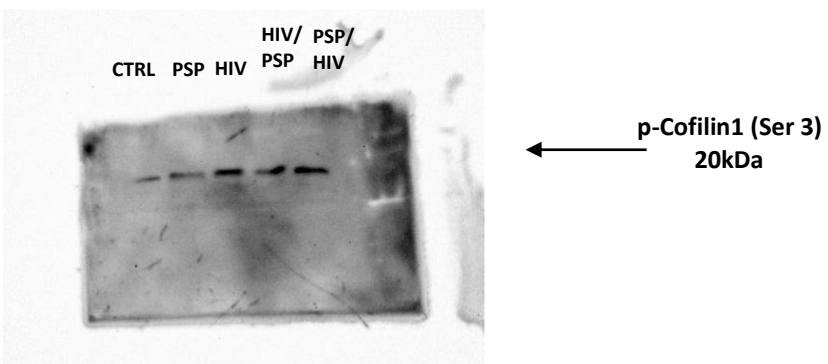
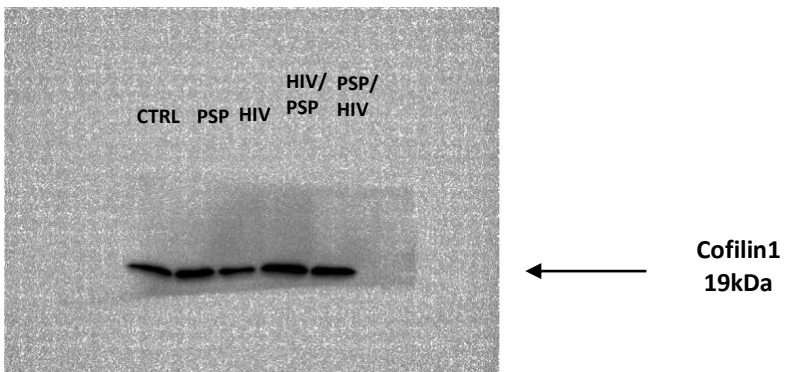
**Western blot photos found in Figure 4:**

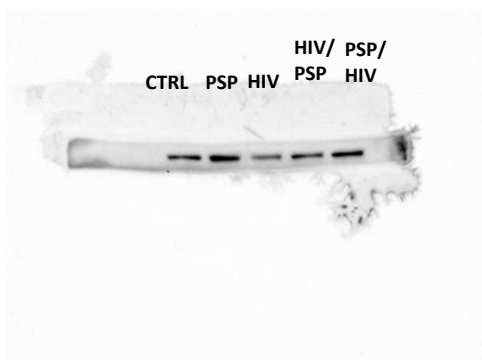


Original representative image of Cofilin1 found within manuscript.

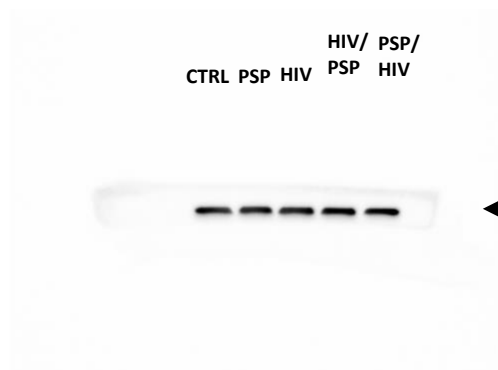


Same photo with contrast adjusted using Bio-Rad Image Lab software:



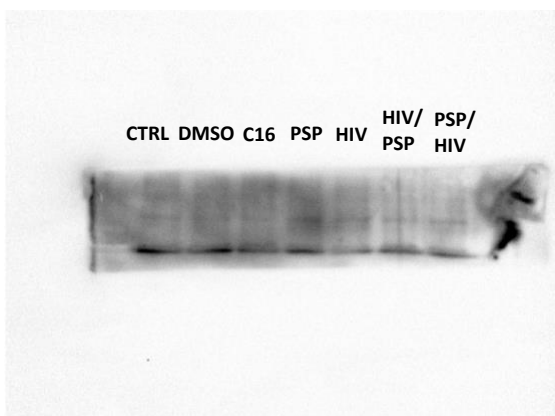


Gelsolin  
83kDa



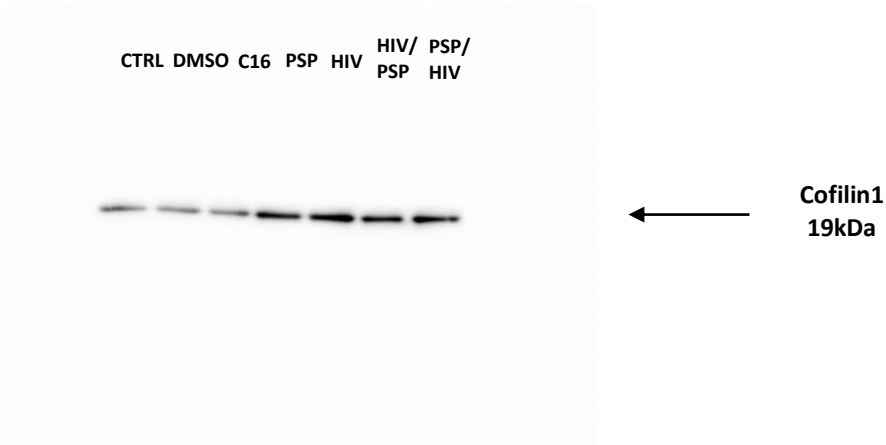
$\beta$ -Actin (Loading Control)  
42kDa

Western blot photos found in Figure 5:

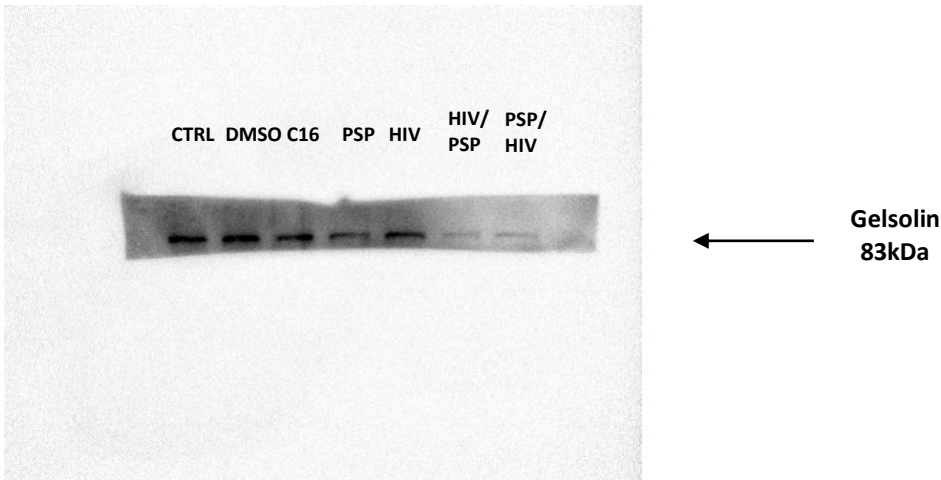
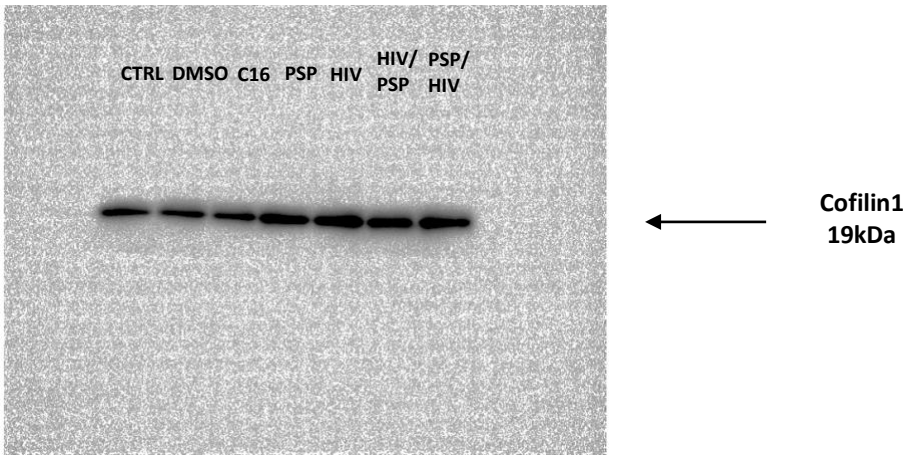


p-Cofilin1 (Ser 3)  
20kDa

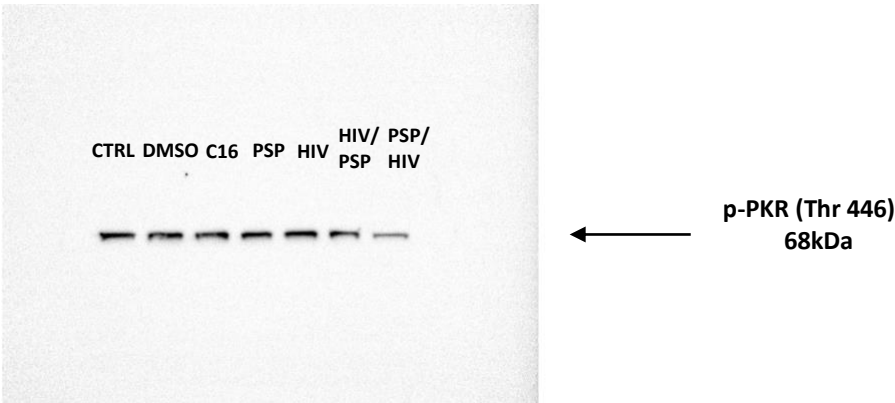
Original representative image for Cofilin1 found within manuscript:



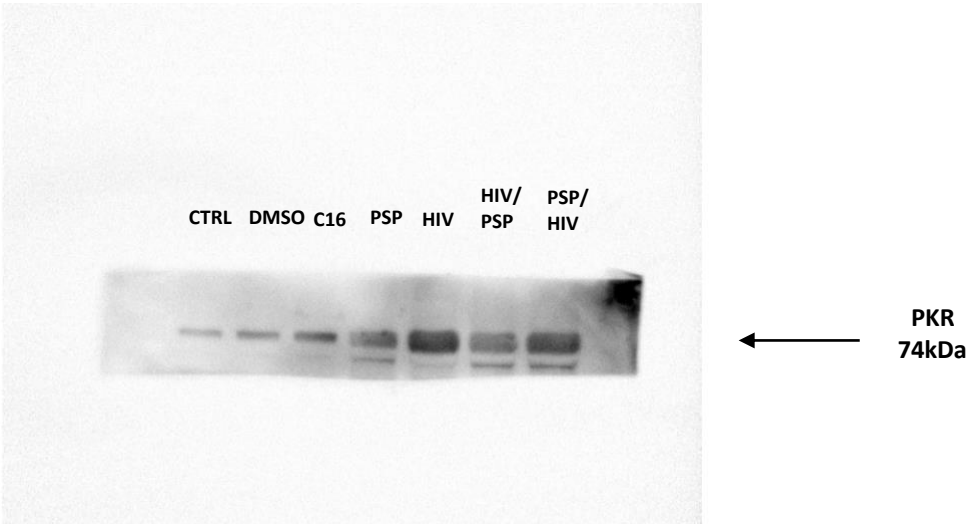
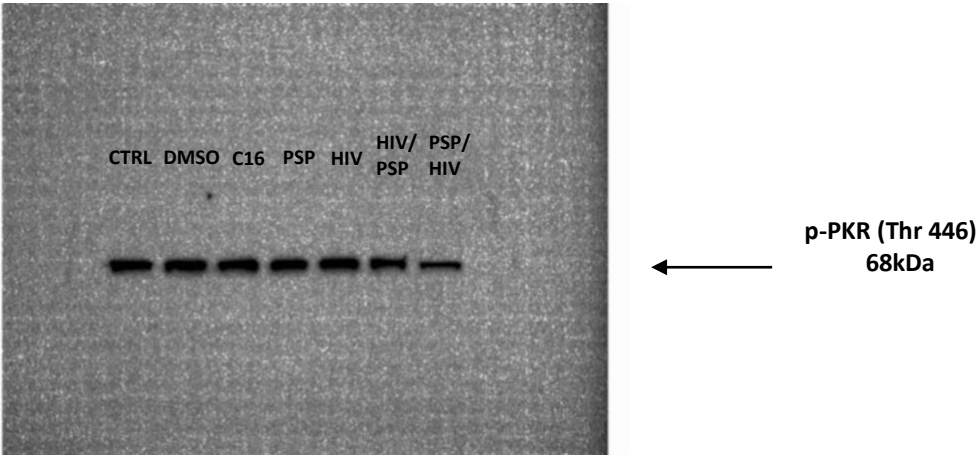
Same photo with contrast adjusted using Bio-Rad Image Lab software:



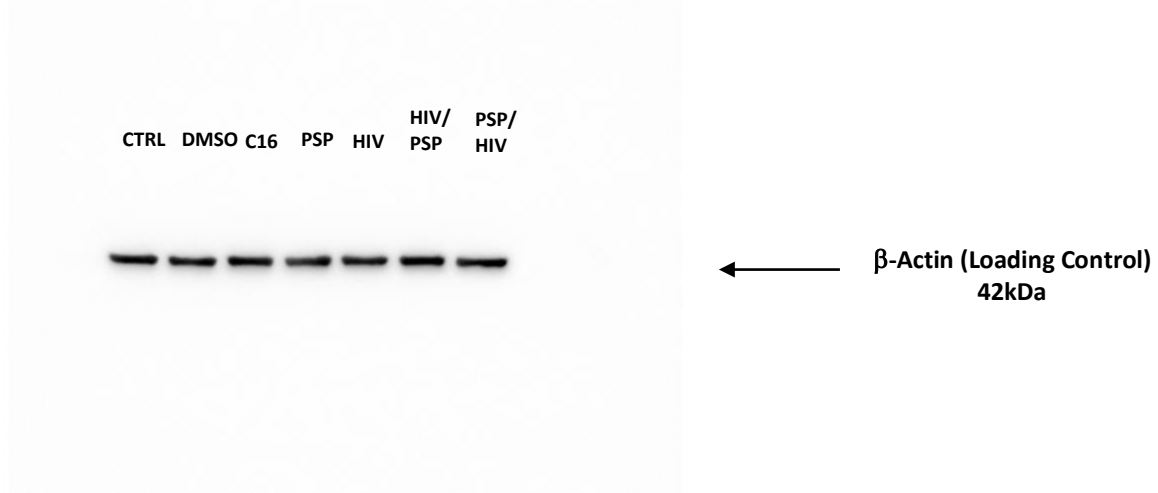
Original representative image of p-PKR found within manuscript:



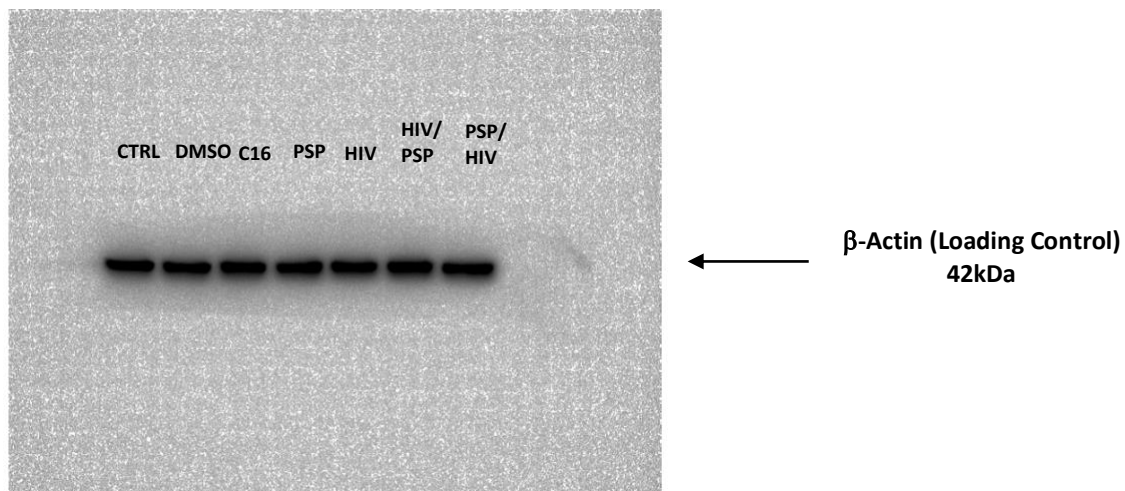
Same photo with contrast adjusted using Bio-Rad Image Lab software:



Original representative image of loading control found in manuscript:

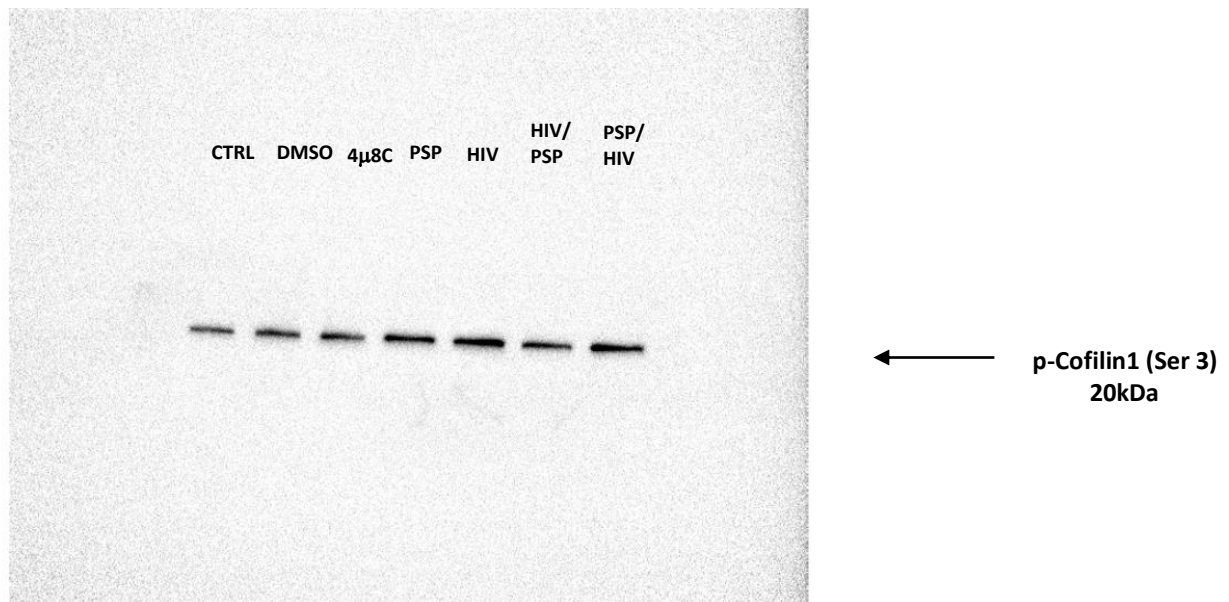


Same photo with contrast adjusted using Bio-Rad Image Lab software

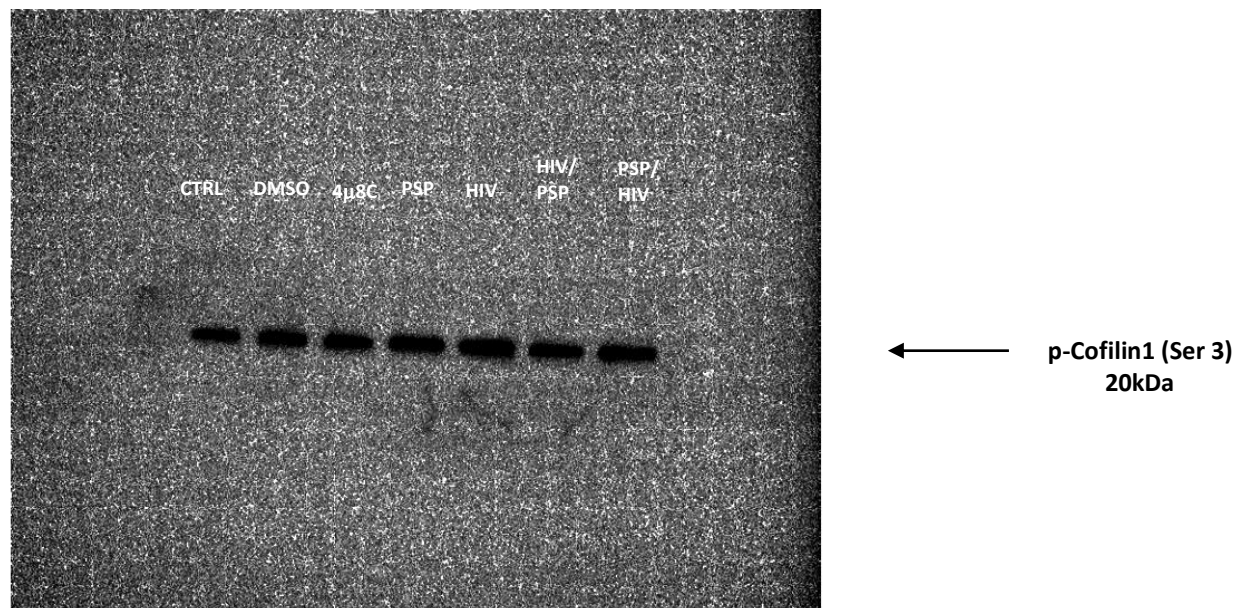


**Western blot photos found in Figure 6:**

Original representative image of p-Cofilin1 found in manuscript:

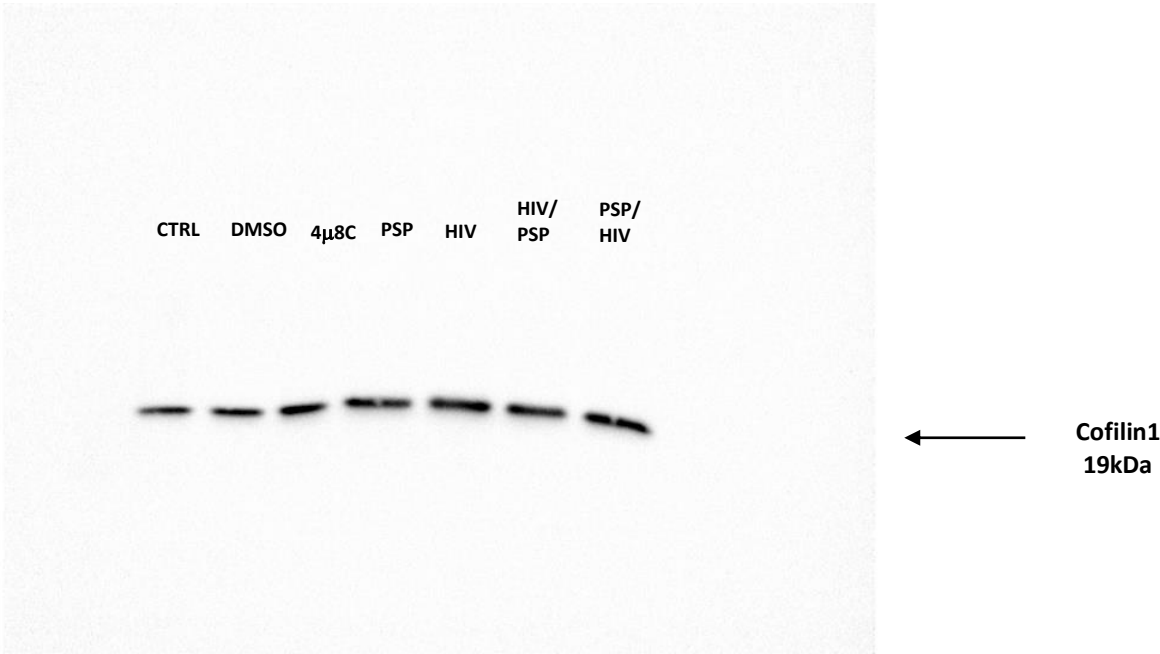


Same photo with contrast adjusted using Bio-Rad Image Lab software

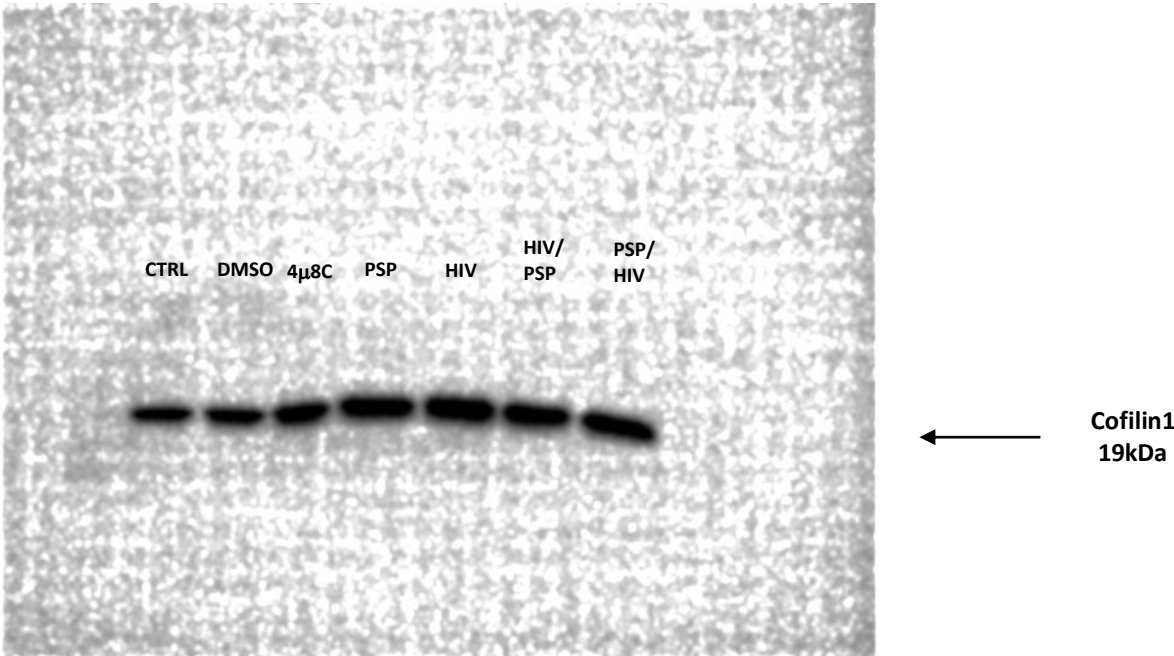


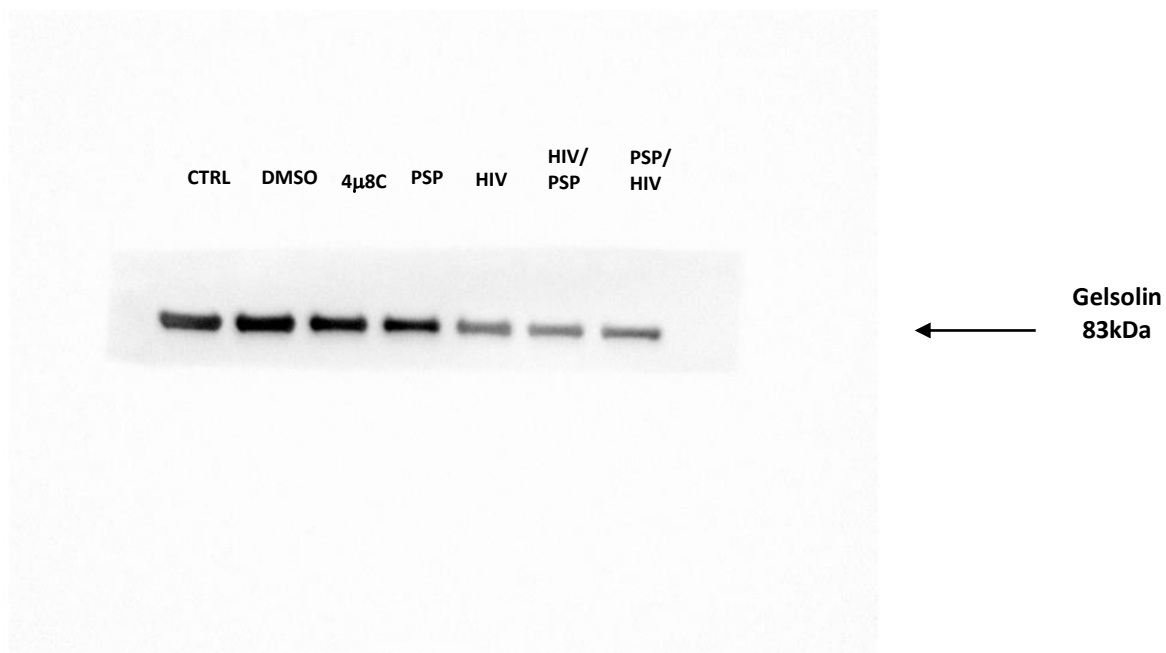


Original representative image of Cofilin1 found in manuscript:

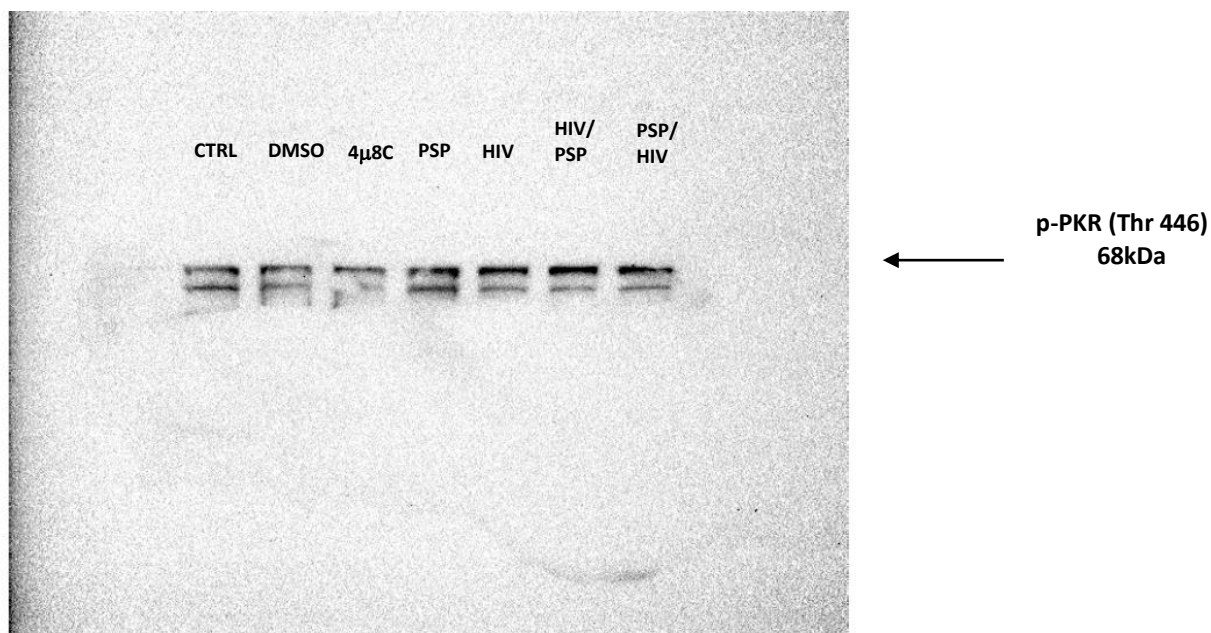


Same photo with contrast adjusted using Bio-Rad Image Lab software

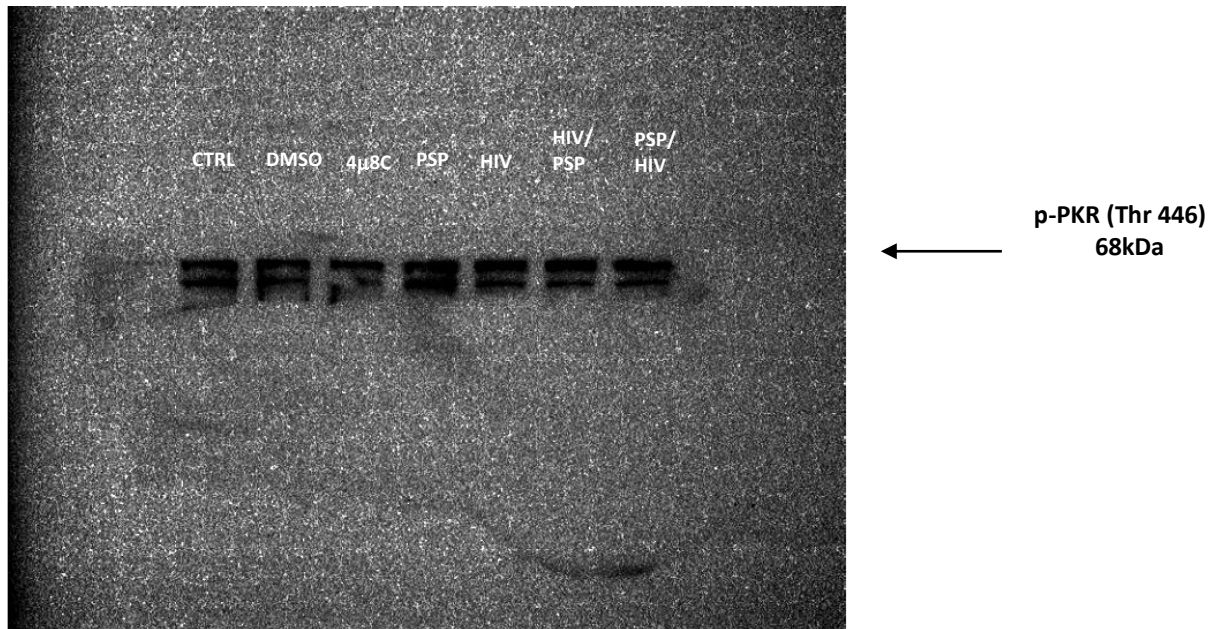




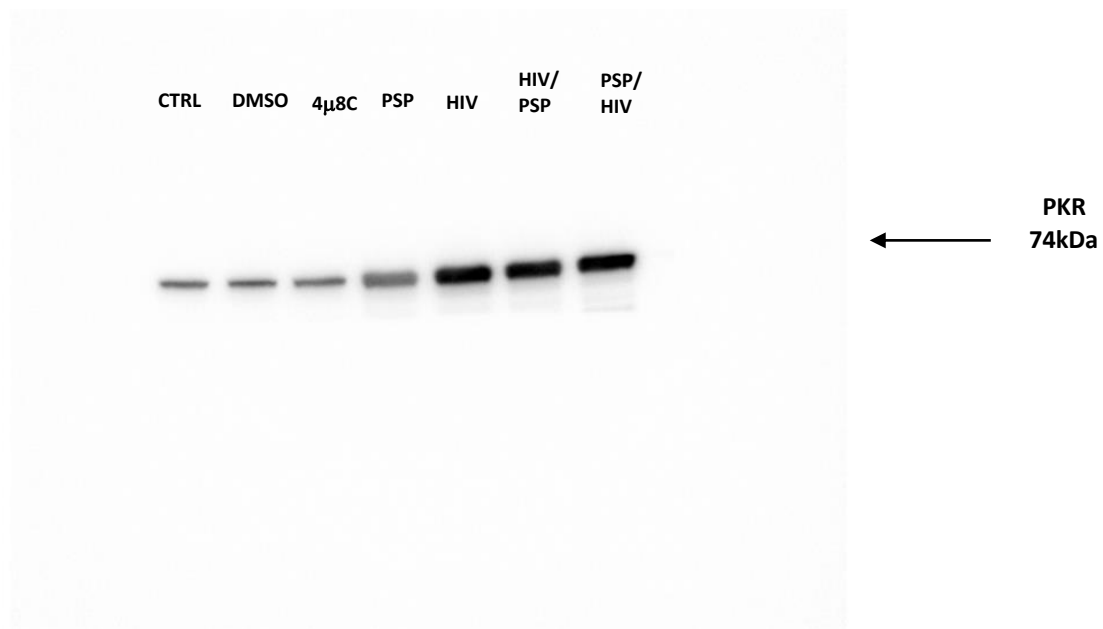
Original representative image of p-PKR found in manuscript:



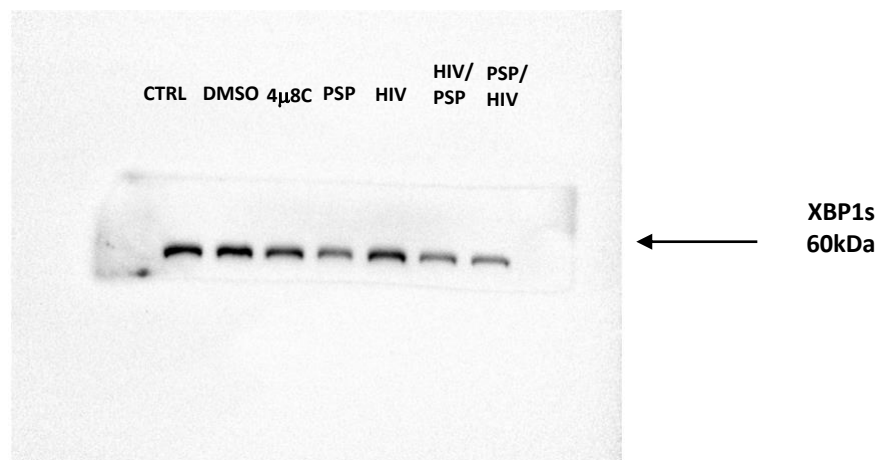
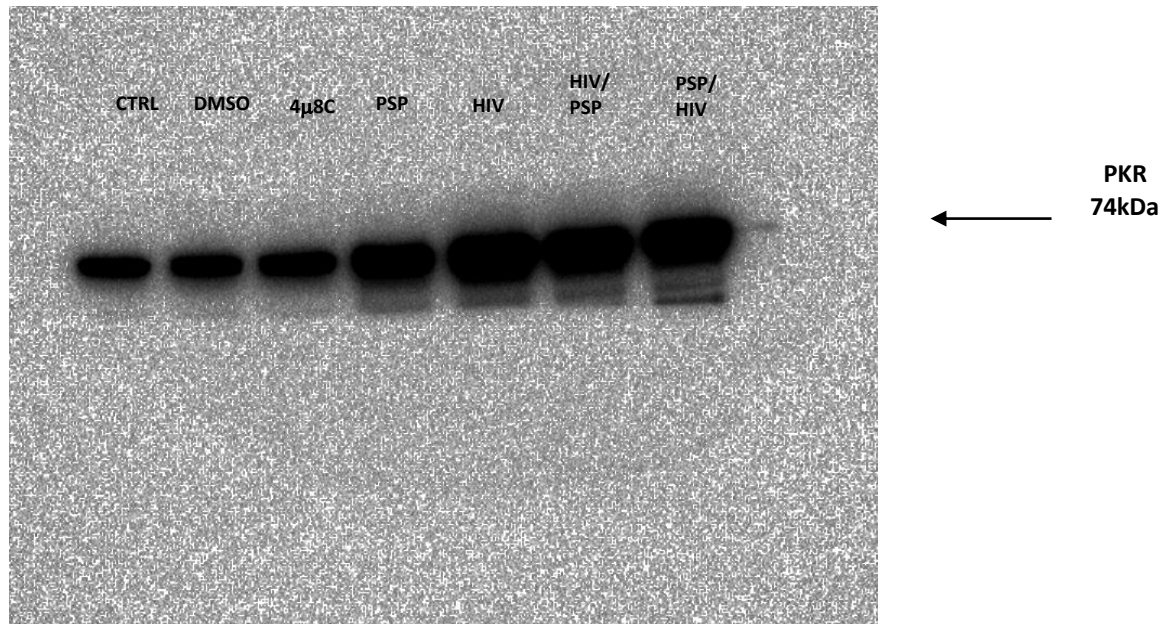
Same photo with contrast adjusted using Bio-Rad Image Lab software



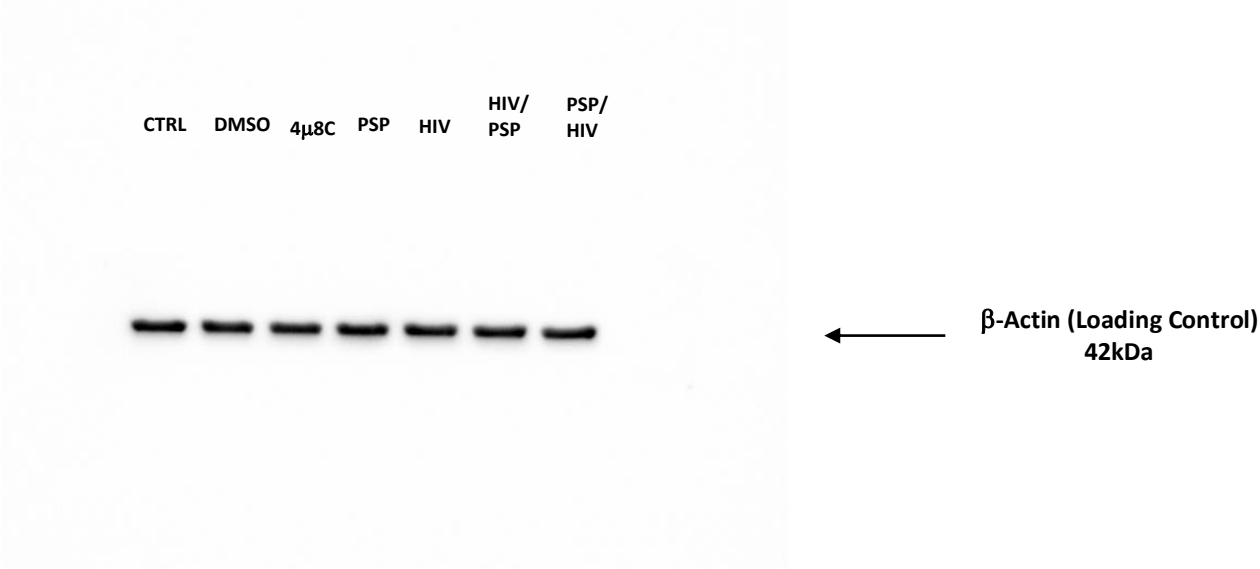
Original representative image of PKR found in manuscript:



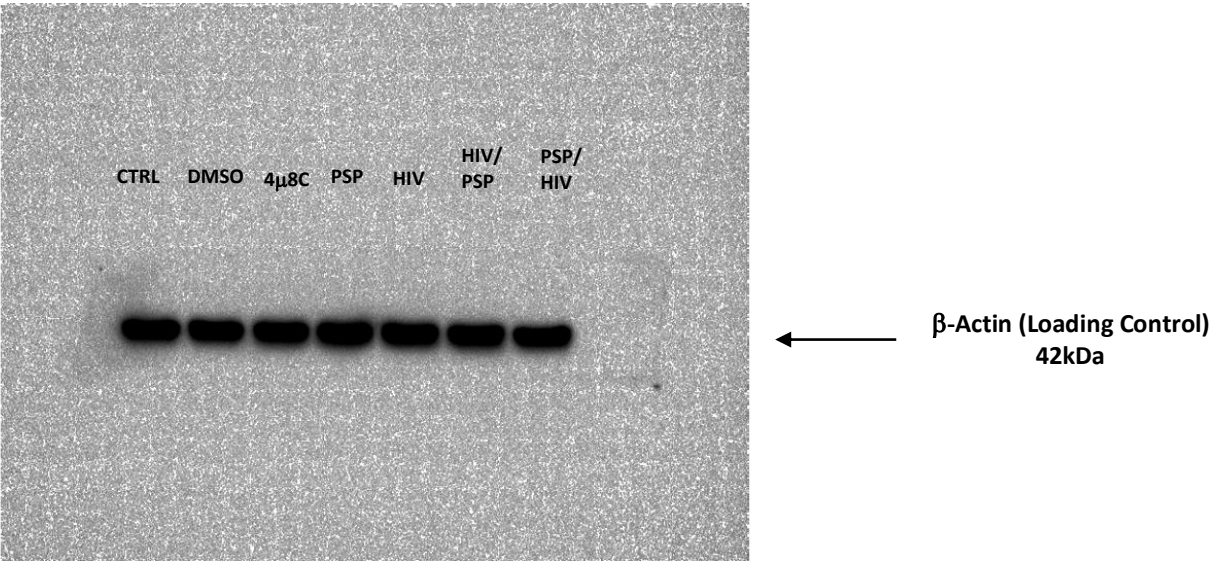
Same photo with contrast adjusted using Bio-Rad Image Lab software



Original representative image of loading control found in manuscript:



Same photo with contrast adjusted using Bio-Rad Image Lab software



**Table S1.** Differentially expressed cytoskeletal-related proteins identified in PSP treated THP1-Blue-CD14 cells.

Accession #	GENE	Quantified Spectra Counts	Protein Name	Average Expression in Control	Average Expression in PSP	Fold Change	Adjusted P Value
Q9NRX4	PHPT1	15	14 kDa phosphohistidine phosphatase	18.18	15.15	-1.20	0.0131
P12814	ACTN1	102	Alpha-actinin-1	18.19	15.15	-1.20	0.0005
Q7Z5R6	APBB1IP	25	Amyloid beta A4 precursor protein-binding family B member 1-interacting protein	18.91	14.42	-1.31	<0.0001
P08133	ANXA6	96	Annexin A6	14.40	18.94	1.32	<0.0001
P02649	APOE	5	Apolipoprotein E	13.64	19.70	1.44	0.0083
P10415	BCL2	5	Apoptosis regulator Bcl-2	20.07	13.26	-1.51	0.0462
Q15121	PEA15	4	Astrocytic phosphoprotein PEA-15	13.87	19.47	1.40	<0.0001
P07384	CAPN1	79	Calpain-1 catalytic subunit	18.31	15.02	-1.22	<0.0001
Q99439	CNN2	20	Calponin-2	18.51	14.83	-1.25	0.0134
P48509	CD151	3	CD151 antigen	15.12	18.21	1.20	0.0007
Q9Y5K6	CD2AP	37	CD2-associated protein	18.75	14.58	-1.29	0.0003
P16070	CD44	9	CD44 antigen	12.32	21.01	1.71	0.0001
Q9NPY3	CD93	10	Complement component C1q receptor	11.69	21.64	1.85	<0.0001
O75956	CDK2AP2	2	Cyclin-dependent kinase 2-associated protein 2	18.49	14.85	-1.25	0.0454
Q5M775	SPECC1	23	Cytospin-B	18.77	14.56	-1.29	0.0002
Q16555	DPYSL2	31	Dihydropyrimidine-nase-related protein 2	13.30	20.04	1.51	<0.0001
Q9NQ86	TRIM36	18	E3 ubiquitin-protein ligase	14.09	19.24	1.37	0.0049
P98172	EFNB1	2	Ephrin-B1	21.50	11.83	-1.82	<0.0001
Q16658	FSCN1	79	Fascin	14.46	18.87	1.31	<0.0001

<b>Q0JRZ9</b>	FCHO2	24	FCH domain only protein 2	18.62	14.71	-1.27	0.0037
<b>Q86UX7</b>	FERMT3	66	Fermitin family homolog 3	13.30	20.04	1.51	<0.0001
<b>O75955</b>	FLOT1	8	Flotillin-1	13.62	19.71	1.45	0.0024
<b>Q5T0N5</b>	FNBP1L	4	Formin-binding protein 1-like	19.56	13.77	-1.42	0.001
<b>O60234</b>	GMFG	15	Glia maturation factor gamma	18.56	14.78	-1.26	0.015
<b>P04792</b>	HSPB1	144	Heat shock protein beta-1	17.77	15.57	-1.14	0.0009
<b>Q9BYW2</b>	SETD2	18	Histone-lysine N- methyltransferase	18.76	14.58	-1.29	0.0018
<b>O00291</b>	HIP1	24	Huntingtin- interacting protein 1	9.99	23.34	2.34	<0.0001
<b>O75146</b>	HIP1R	4	Huntingtin- interacting protein 1-related protein	13.06	20.27	1.55	0.0265
<b>P05107</b>	ITGB2	82	Integrin beta-2	11.36	21.97	1.93	<0.0001
<b>P05362</b>	ICAM1	17	Intercellular adhesion molecule 1	1.41	31.93	22.68	<0.0001
<b>P19525</b>	EIF2AK2	29	Interferon- induced, double- stranded RNA- activated protein kinase	9.69	23.65	2.44	<0.0001
<b>Q9UI08</b>	EVL	26	Isoform 1 of Ena/VASP-like protein	18.48	14.86	-1.24	0.0005
<b>Q9UEY8</b>	ADD3	8	Isoform 1 of Gamma-adducin	20.31	13.02	-1.56	<0.0001
<b>P07355</b>	ANXA2	42	Isoform 2 of A	12.50	20.84	1.67	<0.0001
<b>Q8N556</b>	AFAP1	6	Isoform 2 of Actin filament- associated protein 1	13.33	20.00	1.50	0.0002
<b>Q8NCM8</b>	DYNC2H1	2	Isoform 2 of Cytoplasmic dynein 2 heavy chain 1	18.96	14.37	-1.32	0.007
<b>O95466</b>	FMNL1	47	Isoform 2 of Formin-like protein 1	14.46	18.87	1.30	<0.0001

<b>P20701</b>	ITGAL	35	Isoform 2 of Integrin alpha-L	14.57	18.76	1.29	0.0002
<b>P11215</b>	ITGAM	13	Isoform 2 of Integrin alpha-M	11.17	22.17	1.99	<0.0001
<b>O60711</b>	LPXN	11	Isoform 2 of Leupaxin	7.50	25.84	3.45	<0.0001
<b>Q6WCQ1</b>	MPRIIP	10	Isoform 2 of Myosin phosphatase Rho-interactin	18.43	14.90	-1.24	0.0012
<b>Q9UJF2</b>	RASAL2	29	Isoform 2 of Ras GTPase-activating pro	19.05	14.29	-1.33	<0.0001
<b>Q7LDG7</b>	RASGRP2	18	Isoform 2 of RAS guanyl-releasing protein 2	19.47	13.87	-1.40	<0.0001
<b>Q96RF0</b>	SNX18	17	Isoform 2 of Sorting nexin-18	19.31	14.02	-1.38	<0.0001
<b>Q9UMS6</b>	SYNPO2	2	Isoform 2 of Synaptopodin-2	24.15	9.18	-2.63	<0.0001
<b>O00468</b>	AGRN	28	Isoform 3 of Agrin	10.83	22.50	2.08	<0.0001
<b>P35611</b>	ADD1	19	Isoform 3 of Alpha-adducin	18.58	14.75	-1.26	0.0051
<b>Q16643</b>	DBN1	20	Isoform 3 of Drebrin	19.14	14.20	-1.35	<0.0001
<b>P06396</b>	GSN	197	Isoform 3 of Gelsolin	18.68	14.65	-1.27	<0.0001
<b>P33241</b>	LSP1	2	Isoform 3 of Lymphocyte-specific protein 1	23.57	9.76	-2.42	<0.0001
<b>Q13137</b>	CALCOCO 2	13	Isoform 4 of Calcium-binding and coiled-coil domain-containing	19.83	13.50	-1.47	<0.0001
<b>Q8TDZ2</b>	MICAL1	80	Isoform 4 of Protein-methionine sulfoxide	17.98	15.35	-1.17	0.0092
<b>Q9P266</b>	KIAA1462	4	Junctional protein associated with coronary artery disease	19.53	13.80	-1.42	0.0249
<b>Q86UP2</b>	KTN1	96	Kinectin	17.87	15.47	-1.15	0.04
<b>Q9NQ48</b>	LZTFL1	17	Leucine zipper transcription	19.13	14.20	-1.35	0.0191



			factor-like protein 1				
<b>P07333</b>	CSF1R	2	Macrophage colony- stimulating factor 1 receptor	24.75	8.58	-2.88	0.0021
<b>Q9UPN3</b>	MACF1	152	Microtubule-actin cross-linking factor 1, isoforms 1/2/3/5	18.77	14.56	-1.29	<0.0001
<b>P46821</b>	MAP1B	59	Microtubule- associated protein 1B	11.40	21.93	1.92	<0.0001
<b>P29966</b>	MARCKS	10	Myristoylated alanine-rich C- kinase substrate	14.83	18.50	1.25	<0.0001
<b>O14745</b>	SLC9A3R1	17	Na(+)/H(+) exchange regulatory cofactor NHE-RF1	19.59	13.74	-1.43	<0.0001
<b>Q8NF91</b>	SYNE1	2	Nesprin-1	20.15	13.18	-1.53	0.0009
<b>Q09666</b>	AHNAK	420	Neuroblast differentiation- associated protein	15.46	17.87	1.16	0.0374
<b>P61601</b>	NCALD	21	Neurocalcin-delta	19.10	14.23	-1.34	<0.0001
<b>Q04721</b>	NOTCH2	18	Neurogenic locus notch homolog protein 2	15.30	18.04	1.18	0.0178
<b>Q0ZGT2</b>	NEXN	2	Nexilin	13.71	19.62	1.43	0.0111
<b>Q14980</b>	NUMA1	142	Nuclear mitotic apparatus protein 1	18.02	15.31	-1.18	0.001
<b>Q96RD7</b>	PANX1	3	Pannexin-1	12.65	20.68	1.63	<0.0001
<b>O75781</b>	PALM	8	Paralemmmin-1	19.15	14.19	-1.35	0.0005
<b>Q8TCU6</b>	PREX1	55	Phosphatidylinosi tol 3,4,5- trisphosphate- dependent Rac exchanger 1 protein	19.33	14.00	-1.38	<0.0001
<b>Q6NYC8</b>	PPP1R18	14	Phostensin	14.48	18.85	1.30	0.0008
<b>Q15149</b>	PLEC	239	Plectin	13.84	19.49	1.41	<0.0001
<b>Q8N8S7</b>	ENAH	2	Protein enabled homolog	13.58	19.75	1.45	0.0139
<b>Q96ED9</b>	HOOK2	2	Protein Hook homolog 2	20.39	12.94	-1.58	0.0002

<b>Q05655</b>	PRKCD	57	Protein kinase C delta type	14.64	18.69	1.28	0.0001
<b>Q8TE77</b>	SSH3	24	Protein phosphatase Slingshot homolog 3	19.81	13.52	-1.46	<0.0001
<b>P26447</b>	S100A4	23	Protein S100-A4	18.26	15.07	-1.21	0.0279
<b>P25815</b>	S100P	4	Protein S100-P	8.99	24.35	2.71	<0.0001
<b>O75695</b>	RP2	19	Protein X	18.05	15.29	-1.18	<0.0001
<b>O15553</b>	MEFV	5	Pyrin	13.54	19.79	1.46	0.0044
<b>Q96QF0</b>	RAB3IP	3	Rab-3A- interacting protein	13.61	19.73	1.45	0.0093
<b>O15211</b>	RGL2	15	Ral guanine nucleotide dissociation stimulator-like 2	18.78	14.56	-1.29	0.0015
<b>Q9H6Z4</b>	RANBP3	16	Ran-binding protein 3	18.66	14.68	-1.27	0.0063
<b>O14807</b>	MRAS	3	Ras-related protein M-Ras	12.66	20.67	1.63	0.0059
<b>Q92930</b>	RAB8B	6	Ras-related protein Rab-8B	13.81	19.53	1.41	0.0092
<b>Q86X27</b>	RALGPS2	3	Ras-specific guanine nucleotide- releasing factor RalGPS2	19.63	13.70	-1.43	0.0161
<b>Q53QZ3</b>	ARHGAP1 5	18	Rho GTPase- activating protein 15	18.79	14.55	-1.29	0.0012
<b>Q68EM7</b>	ARHGAP1 7	23	Rho GTPase- activating protein 17	19.28	14.05	-1.37	0.0234
<b>Q969X0</b>	RILPL2	7	RILP-like protein 2	13.08	20.26	1.55	0.0048
<b>Q9GZR1</b>	SEN6	10	Sentrin-specific protease 6	19.62	13.71	-1.43	<0.0001
<b>Q96GX5</b>	MASTL	12	Serine/threonine- protein kinase greatwall	13.87	19.46	1.40	<0.0001
<b>Q8TDX7</b>	NEK7	13	Serine/threonine- protein kinase Nek7	18.48	14.85	-1.24	0.0017
<b>P02787</b>	TF	2	Serotransferrin	15.52	17.81	1.15	<0.0001
<b>P16949</b>	STMN1	49	Stathmin	18.94	14.40	-1.32	<0.0001

<b>Q9UQE7</b>	SMC3	98	Structural maintenance of chromosomes protein 3	17.90	15.44	-1.16	0.0274
<b>Q9UH65</b>	SWAP70	46	Switch-associated protein 70	18.58	14.75	-1.26	0.0003
<b>Q8N3V7</b>	SYNPO	2	Synaptopodin	20.44	12.89	-1.59	<0.0001
<b>O00560</b>	SDCBP	22	Syntenin-1	15.33	18.00	1.17	0.0241
<b>P36897</b>	TGFBR1	5	TGF-beta receptor type-1	12.43	20.90	1.68	0.0005
<b>O94759</b>	TRPM2	3	Transient receptor potential cation channel subfamily M member 2	12.33	21.00	1.70	<0.0001
<b>Q9NZR1</b>	TMOD2	7	Tropomodulin-2	13.46	19.88	1.48	0.0007
<b>P67936</b>	TPM4	26	Tropomyosin alpha-4 chain	13.16	20.17	1.53	<0.0001
<b>P23381</b>	WARS	56	Tryptophan-- tRNA ligase, cytoplasmic	15.53	17.81	1.15	0.0109
<b>Q15814</b>	TBCC	21	Tubulin-specific chaperone C	18.42	14.91	-1.24	0.0092
<b>P21580</b>	TNFAIP3	17	Tumor necrosis factor alpha- induced protein 3	9.47	23.87	2.52	<0.0001
<b>P08631</b>	HCK	26	Tyrosine-protein kinase	13.19	20.14	1.53	<0.0001
<b>Q9NQC7</b>	CYLD	18	Ubiquitin carboxyl-terminal hydrolase	13.98	19.36	1.38	0.0003
<b>B0I1T2</b>	MYO1G	51	Unconventional myosin-Ig	14.26	19.08	1.34	0.0054
<b>Q92614</b>	MYO18A	72	Unconventional myosin-XVIIIa	18.74	14.59	-1.28	<0.0001
<b>Q03405</b>	PLAUR	9	Urokinase plasminogen activator surface receptor	11.02	22.31	2.03	<0.0001
<b>P08670</b>	VIM	58	Vimentin	8.95	24.38	2.72	<0.0001
<b>P04004</b>	VTN	6	Vitronectin	11.67	21.66	1.86	<0.0001

**Table S2.** Differentially expressed UPR proteins identified in PSP treated THP1-Blue-CD14 cells.

Accession #	GENE	Quantified Spectra Counts	Protein Name	Average Expression in Control	Average Expression in PSP	Fold Change	Adjusted P Value
<b>O60613</b>	SELENOH	10	15 kDa selenoprotein H	19.43	13.90	-1.40	<0.0001
<b>P05067</b>	APP	23	Amyloid beta A4 protein	14.05	19.28	1.37	<0.0001
<b>P32929</b>	CTH	13	Cystathionine gamma-lyase	13.00	20.33	1.56	<0.0001
<b>Q9H3Z4</b>	DNAJC5	7	DnaJ homolog subfamily C member 5	17.90	15.44	-1.16	0.0287
<b>Q92611</b>	EDEM1	19	ER degradation-enhancing alpha-mannosidase-like protein 1	14.82	18.52	1.25	0.0278
<b>Q9NRD1</b>	FBXO6	4	F-box only protein 6	12.31	21.03	1.71	<0.0001
<b>Q06210</b>	GFPT1	62	Glutamine--fructose-6-phosphate aminotransferase [isomerizing] 1	14.87	18.47	1.24	0.0084
<b>Q9HAV7</b>	GRPEL1	13	GrpE protein homolog 1, mitochondrial	14.22	19.11	1.34	0.0003
<b>Q92598</b>	HSPH1	82	Heat shock protein 105 kDa	14.40	18.93	1.31	<0.0001
<b>P08238</b>	HSP90AB1	272	Heat shock protein HSP 90-beta	15.44	17.89	1.16	0.0299
<b>Q9Y4L1</b>	HYOU1	120	Hypoxia up-regulated protein 1	14.79	18.55	1.25	<0.0001
<b>Q96HD1</b>	CRELD1	9	Isoform 2 of Cysteine-rich with EGF-like domain protein 1	14.14	19.20	1.36	0.0373
<b>P04233</b>	CD74	14	Isoform 2 of HLA class II	12.98	20.35	1.57	<0.0001

			histocompatibility antigen ga				
<b>Q5F1R6</b>	DNAJC21	2	Isoform 3 of DnaJ homolog subfamily C member 21	19.58	13.75	-1.42	<0.0001
<b>Q14145</b>	KEAP1	10	Kelch-like ECH- associated protein 1	19.78	13.55	-1.46	<0.0001
<b>Q13451</b>	FKBP5	39	Peptidyl-prolyl cis-trans isomerase	14.00	19.33	1.38	<0.0001
<b>O00459</b>	PIK3R2	15	Phosphatidylinosi tol 3-kinase regulatory subunit beta	18.77	14.57	-1.29	0.0015
<b>P02545</b>	LMNA	111	Prelamin-A/C	14.46	18.88	1.31	<0.0001
<b>P07237</b>	P4HB	259	Protein disulfide- isomerase	15.35	17.99	1.17	0.0086
<b>Q9BZQ8</b>	FAM129A	44	Protein Niban	14.18	19.16	1.35	<0.0001
<b>Q58FG1</b>	HSP90AA4P	2	Putative heat shock protein HSP 90-alpha A4	18.42	14.92	-1.23	0.0244
<b>O75460</b>	ERN1	5	Serine/threonine- protein kinase/endoribon uclease IRE1	13.86	19.47	1.41	0.0359
<b>Q96EQ0</b>	SGTB	6	Small glutamine- rich tetratricopeptide repeat-containing protein beta	12.71	20.63	1.62	0.0012
<b>P38646</b>	HSPA9	225	Stress-70 protein, mitochondrial	15.13	18.20	1.20	0.0004
<b>Q8NBS9</b>	TXNDC5	26	Thioredoxin domain- containing protein 5	15.59	17.74	1.14	0.0017
<b>O14657</b>	TOR1B	8	Torsin-1B	12.03	21.30	1.77	<0.0001

<b>Q9NS93</b>	TM7SF3	3	Transmembrane 7 superfamily member 3	19.55	12.83	-1.52	0.0099
<b>Q96RU7</b>	TRIB3	5	Tribbles homolog 3	13.75	19.59	1.43	0.0015