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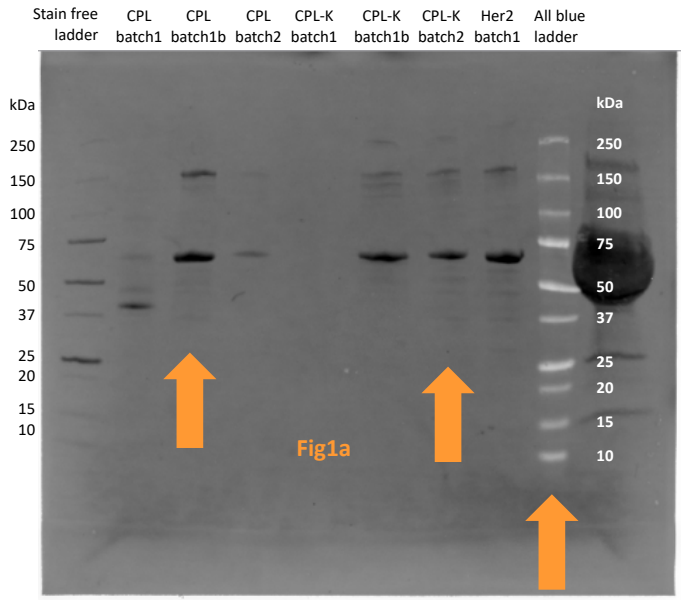
# Raw data of blots shown in Figure 1 and Figure 6

## A. Figure 1

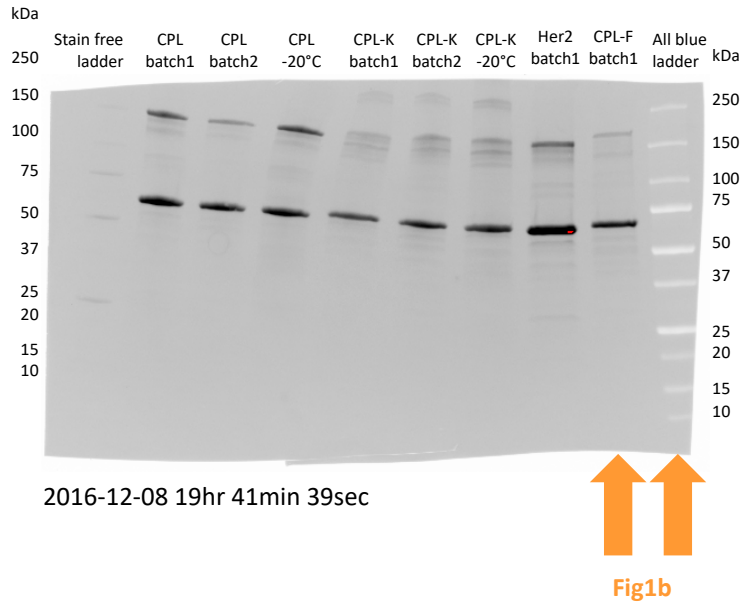
Figure 1a and Figure 1b represent to different blots (therefore two figures).

### Source data for Fig.S1a:




2016-12-08 19hr48min35sec

### Source data for Fig.S1b:




2016-12-08 19hr 41min 39sec

**B. Figure 6**

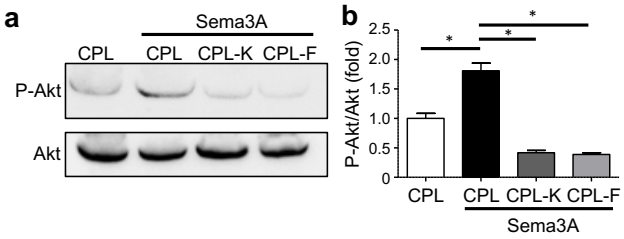
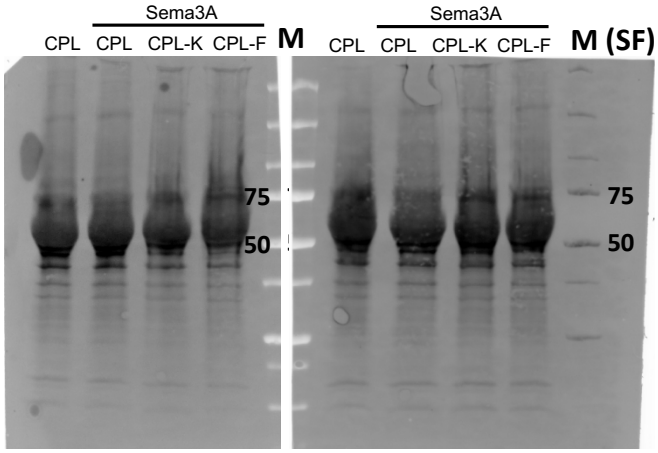
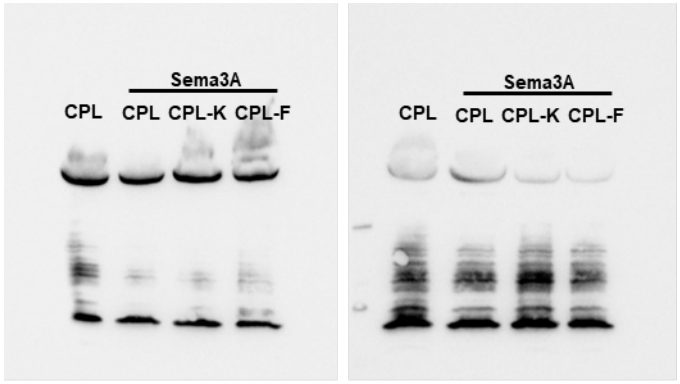



Figure 6a shows the results of staining the same protein extracts with two different antibodies, one specific for Akt and one specific for P-Akt. The Westernblot xperiment was performed using the same nitrocellulose membrane, that was cut before incubation with the antibodies. Figure 6b shows the densitometric quantification of the bands seen with Act and P-Act antibody. The results are displayed as fold change in the relative amount of P-Akt versus Akt (ratio of the densitometric quantification of the bands seen with P-AKt antibody to Akt; the densitometric data were normalized to the amount of protein in the lanes of the blot) which was normalized to the relative amount of P-Akt over Akt in the control (CPL), which was set to 1. The statistics for quantification provided in the figure is based on densitometric analysis of Western blots from three independent experiments.

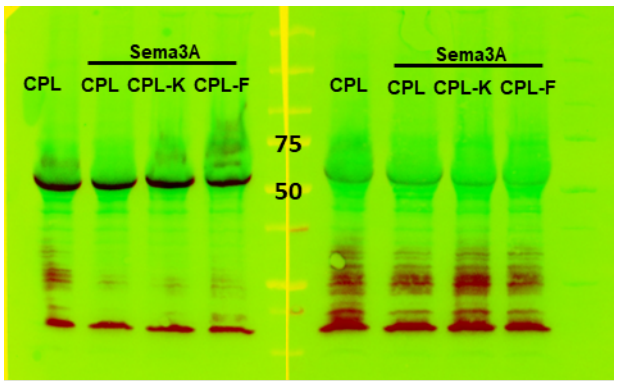
The Westernblot experiment shown in in Figure 6a was performed by loading two halves of a Biorad stain-free SDS-PAGE gel with the same samples. Following electrophoresis, the gel was blotted to membrane, imaged under UV light, and cut into the two halves:



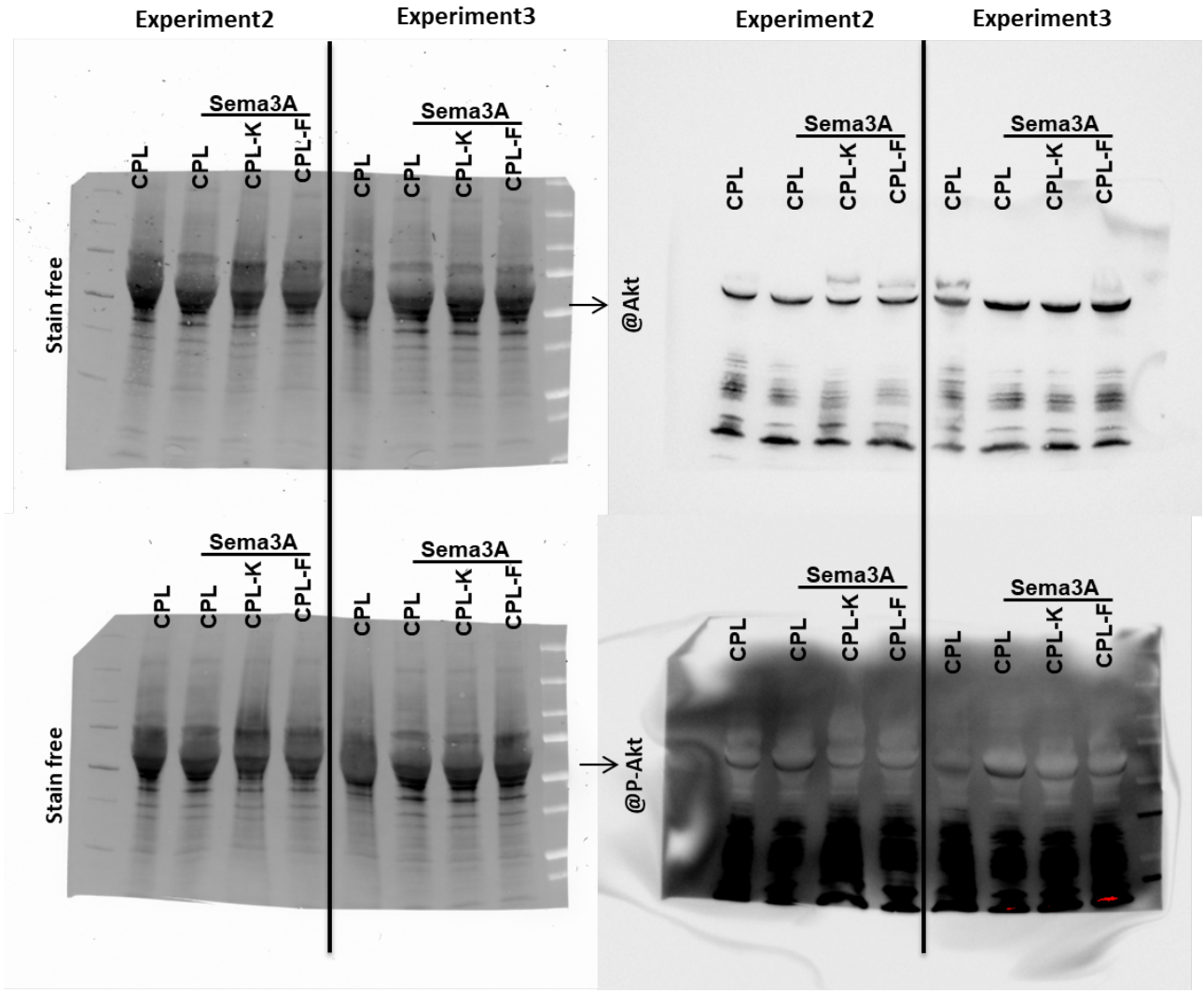
The left half and the right half of the filter were then incubated separately with antibodies for the specific detection of Akt and P-Akt, respectively, and developed for luminescent detection:




To verify the molecular size of the detected Akt and P-Akt bands, the stain-free and immunoblot images were merged: to co-visualize the Akt / P-Akt bands with the size marker (next page):




The two additional replicate experiments (Experiment 2 and Experiment 3) were combined. Here samples from the second experiment and the third experiment were each combined in two stain free SDS-PAGE gels of which one was incubated with anti Akt antibody and second was incubated with anti-P-Akt antibody.




The bands in Westernblots were quantified with Biorad Image Lab Software:

| | | Akt | | | P-Akt | | | P-Akt/Akt |
|---|---|---|---|---|---|---|---|---|
| | lane | Volume (Int) | Norm. Factor | Norm. Vol. (Int) | Volume (Int) | Norm. Factor | Norm. Vol. (Int) | |
| Experment 1 | CPL1 | 52252817 | 1 | 52252817 | 399035750 | 1 | 399035750 | 7,636636126 |
| | CPL sema1 | 41670402 | 0,941425 | 39229571 | 478485000 | 1,163228 | 556587149,6 | 14,18794892 |
| | CPLK sema1 | 51773168 | 0,980361 | 50756398 | 178266100 | 0,972284 | 173325276,8 | 3,414845884 |
| | CPLF sema1 | 39527470 | 0,924094 | 36527081 | 82760650 | 1,161332 | 96112591,19 | 2,631269419 |
| Experment 2 | CPL2 | 18144404 | 1 | 18144404 | 109402436 | 1 | 109402436 | 6,02954145 |
| | CPL sema2 | 22270119 | 0,789664 | 17585911,25 | 200682150 | 0,986867 | 198046591,3 | 11,26166216 |
| | CPLK sema2 | 23340644 | 0,985822 | 23009720,35 | 82707012 | 0,887471 | 73400074,65 | 3,18995944 |
| | CPLF sema2 | 25537307 | 0,99191 | 25330710,19 | 81373046 | 1,008687 | 82079933,65 | 3,240332902 |
| Experment 3 | CPL3 | 18495542 | 1,101011 | 20363795,19 | 166300959 | 0,987791 | 164270590,6 | 8,066796441 |
| | CPL sema3 | 18216225 | 0,740838 | 13495271,7 | 190734760 | 0,982507 | 187398236,8 | 13,88621445 |
| | CPLK sema3 | 45759160 | 0,963985 | 44111143,85 | 107049187 | 1,017992 | 108975216 | 2,470469057 |
| | CPLF sema3 | 58820372 | 0,969202 | 57008822,18 | 120027756 | 1,211812 | 145451075,1 | 2,551378357 |

| P-Akt/Akt | CPL | CPL + Sema3A | CPLK + Sema3A | CPLF + Sema3A |
|---|---|---|---|---|
| Experment 1 | 7,636636126 | 14,18794892 | 3,414845884 | 2,631268291 |
| Experment 2 | 6,02954145 | 11,26166216 | 3,18995944 | 3,240332902 |
| Experment 3 | 8,066796441 | 13,88621445 | 2,470469057 | 2,551378357 |
| mean | 7,244324672 | | | |

| P-Akt/Akt normalized to mean of CPL | CPL | CPL + Sema3A | CPLK + Sema3A | CPLF + Sema3A |
|---|---|---|---|---|
| Experment 1 | 1,054154317 | 1,958491587 | 0,471382225 | 0,363217886 |
| Experment 2 | 0,832312427 | 1,554549619 | 0,440339105 | 0,447292612 |
| Experment 3 | 1,113533256 | 1,916840434 | 0,341021306 | 0,352189952 |
| mean | 1 | 1,809960547 | 0,417580878 | 0,387566816 |