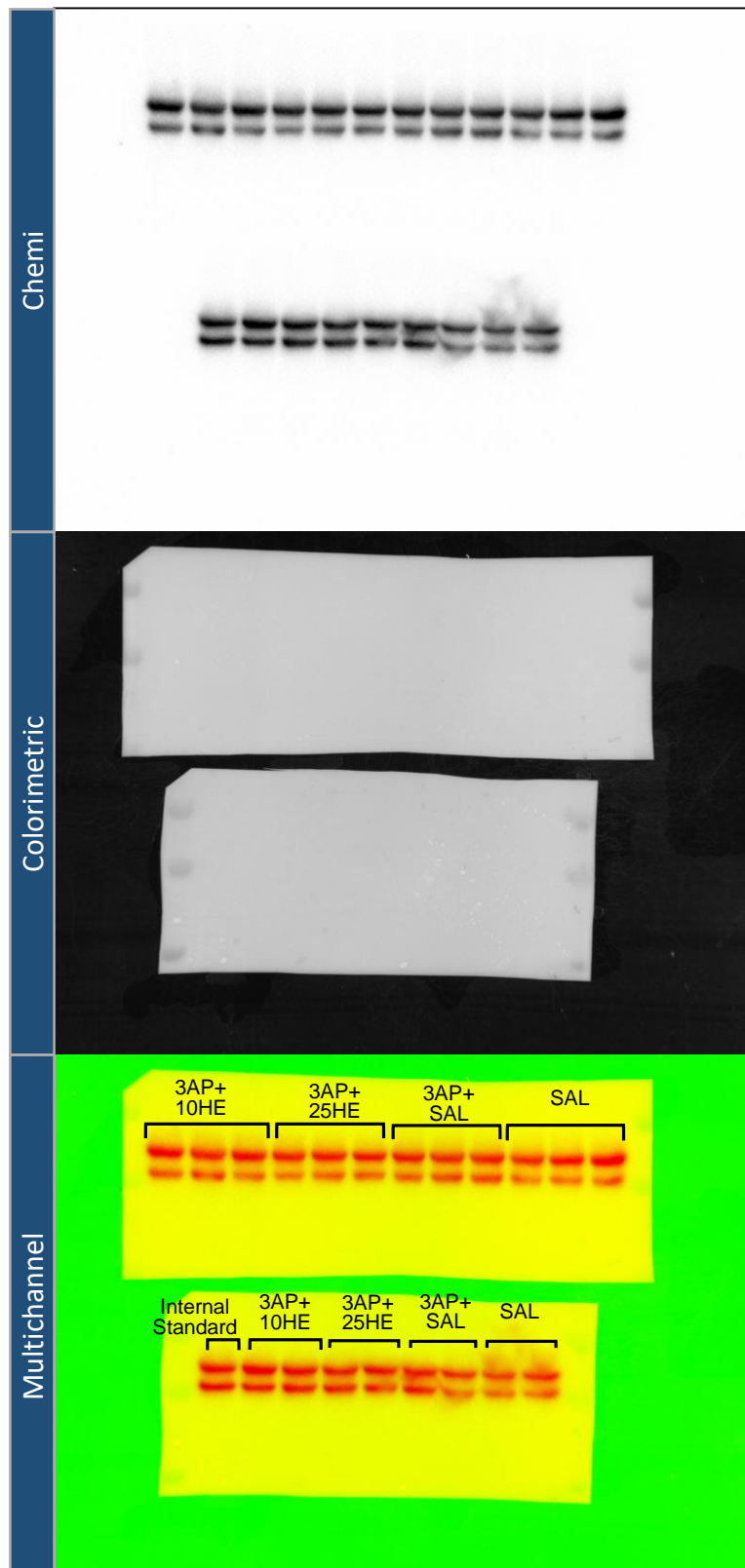


***Hericium erinaceus* potentially rescues behavioural motor deficits through ERK-CREB-PSD95 neuroprotective mechanisms in rat model of 3-acetylpyridine-induced cerebellar ataxia**

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**Supplementary information**

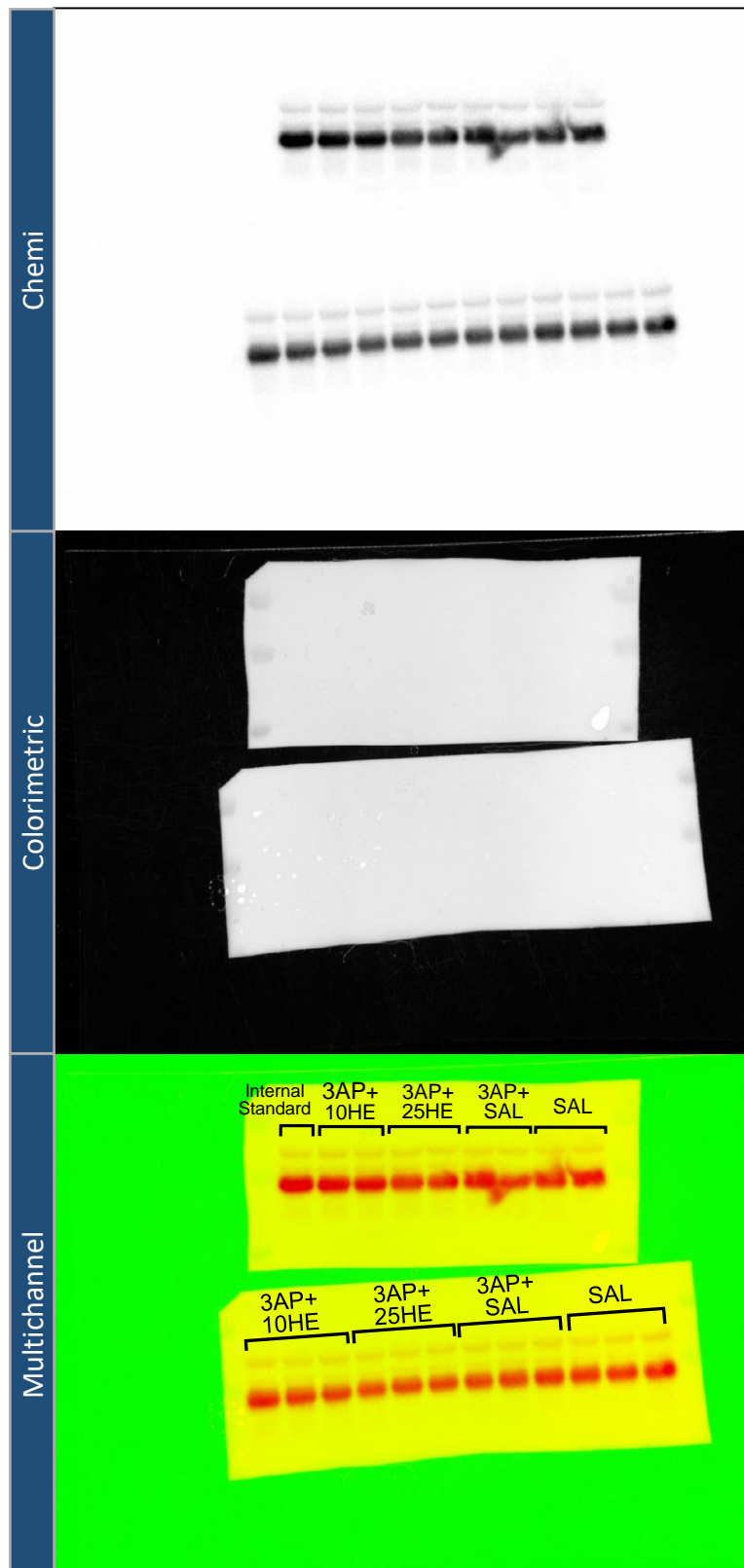


**Figure S1:** Western blot analysis of ERK1/2. Two blots were exposed and captured in one image. The lower blot is used as a representative figure in the manuscript without including the internal standard.

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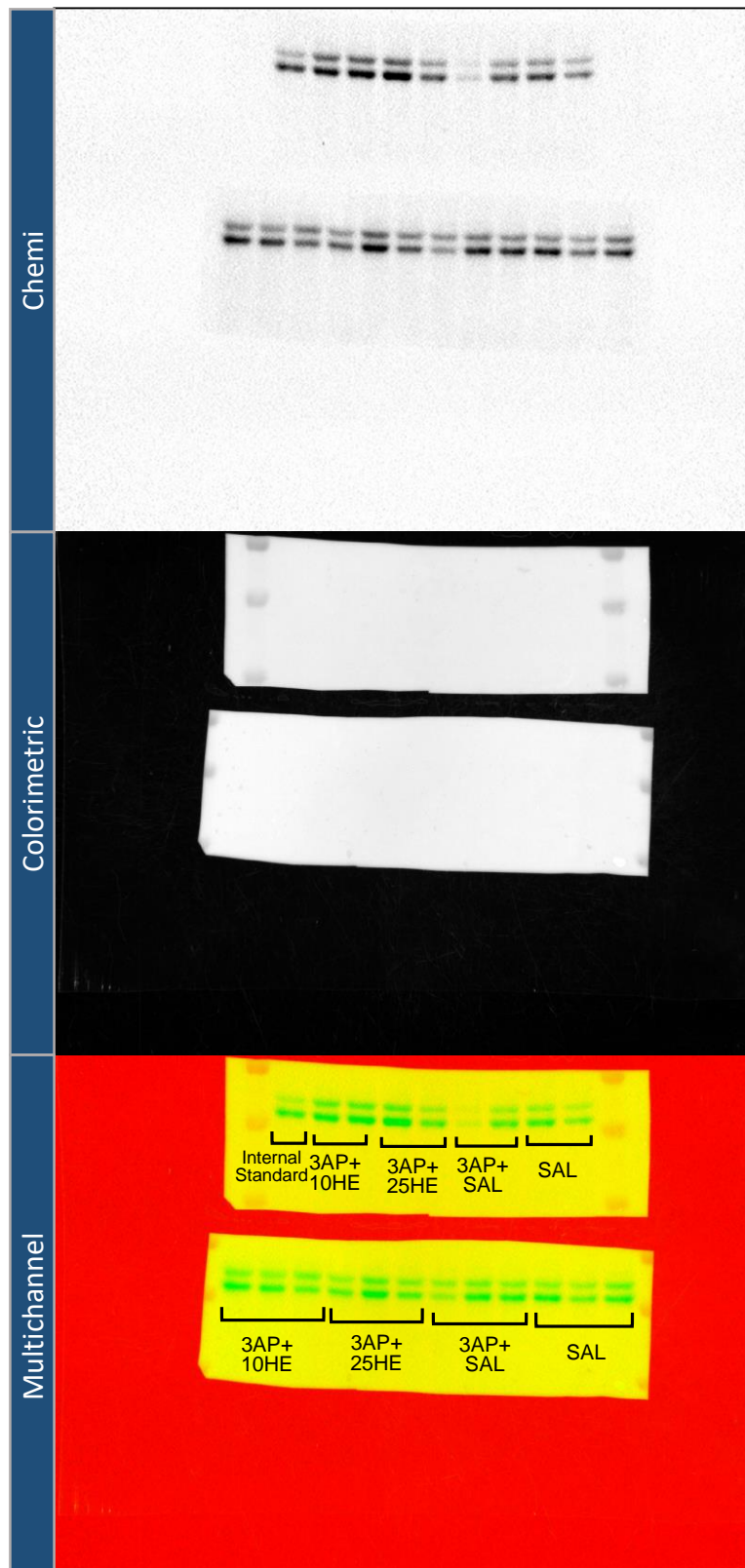


**Figure S2:** Western blot of GAPDH as a loading control for ERK1/2. The upper blot is used as a representative figure in the manuscript without including the internal standard.

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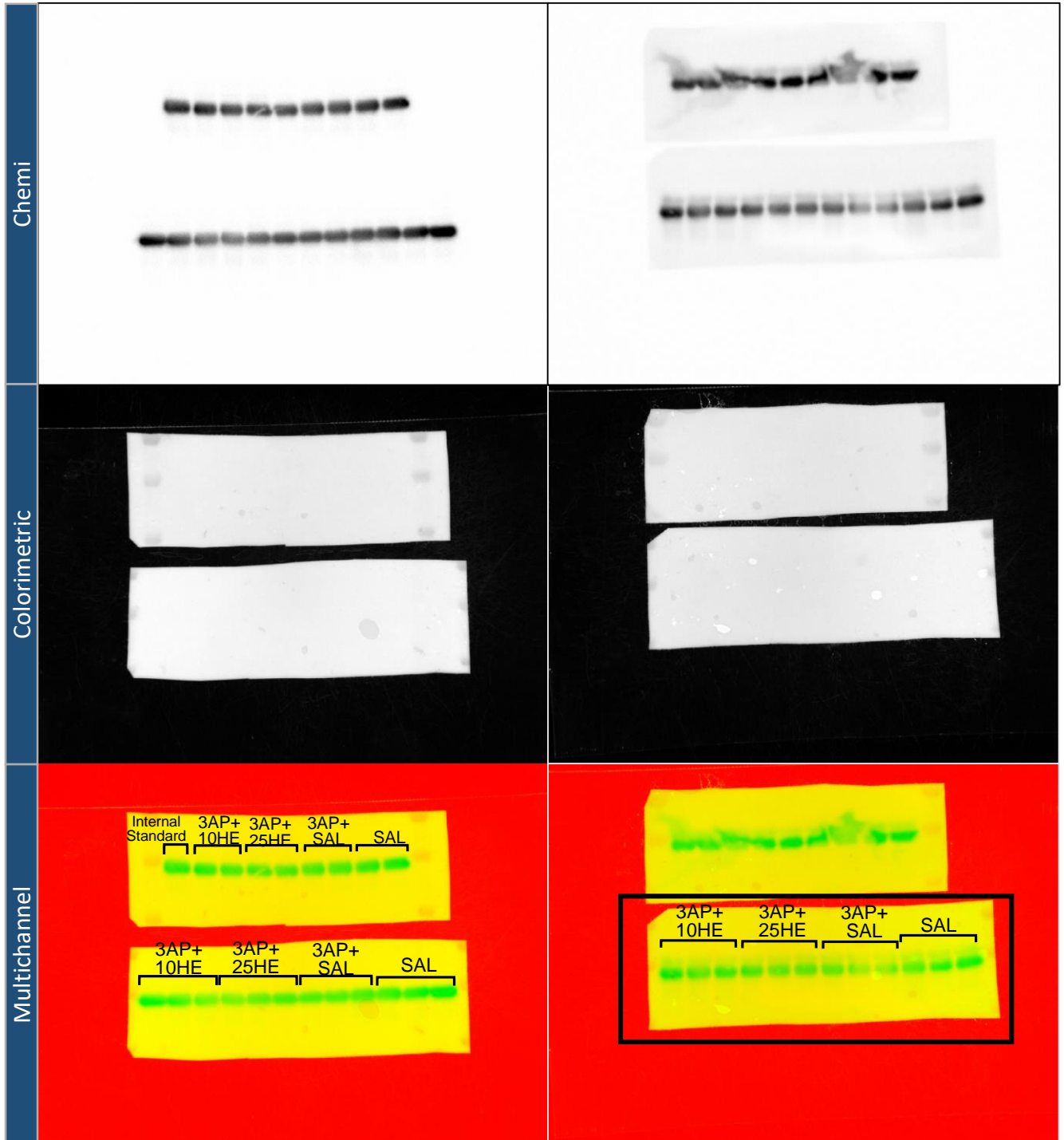


**Figure S3:** Western blot analysis of pERK1/2. Two blots were exposed and captured in one image. The upper blot is used as a representative figure in the manuscript without including the internal standard.

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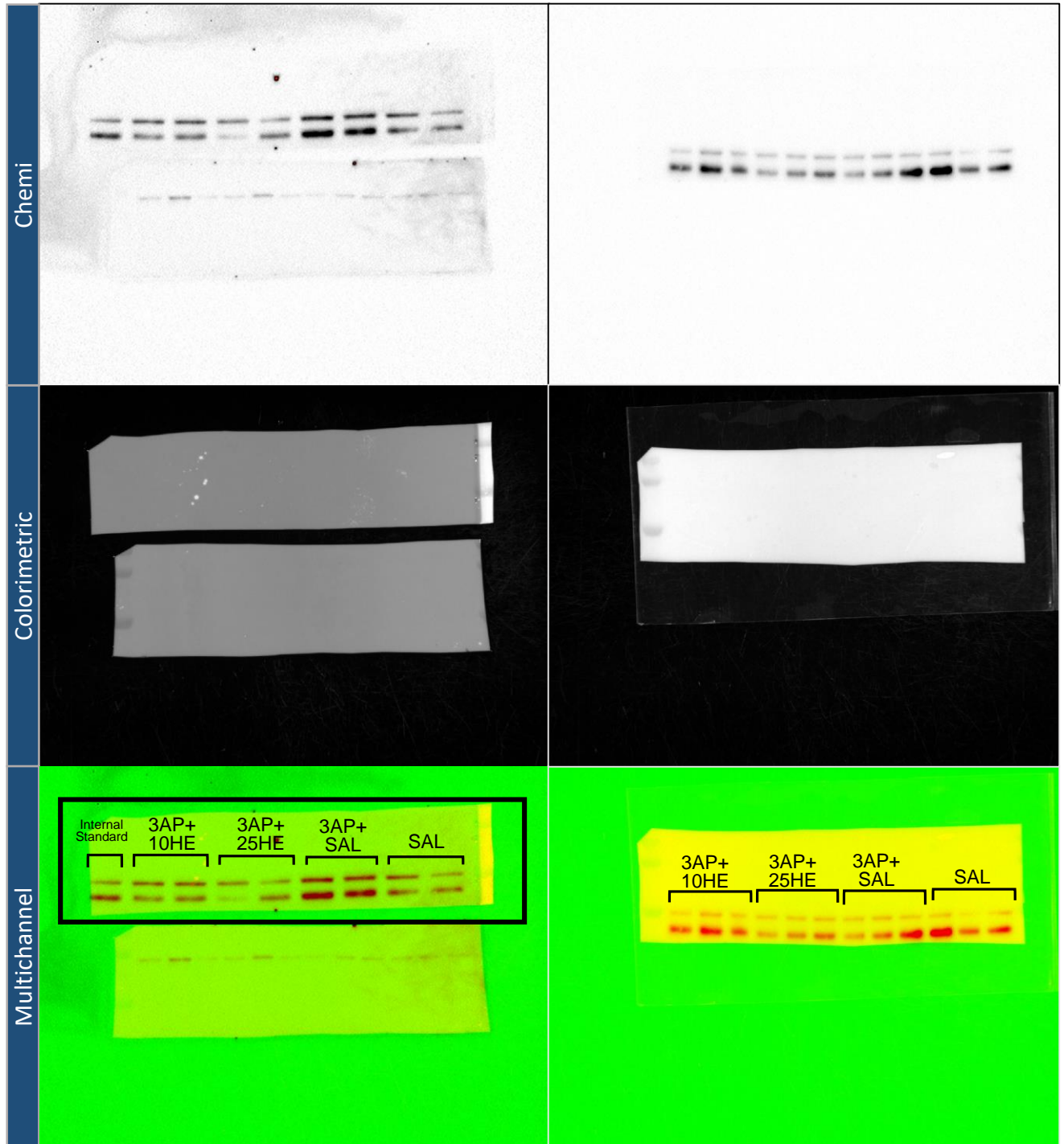


**Figure S4 : Western blot of GAPDH as a loading control for pERK1/2, SYP (Gel 1) and PSD-95 (left). Two blots were exposed and captured in one image. The upper blot is used as a representative figure in the manuscript without including the internal standard. Western Blot of GAPDH as a loading control for SYP (Gel 2) (right).**

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**Supplementary information**



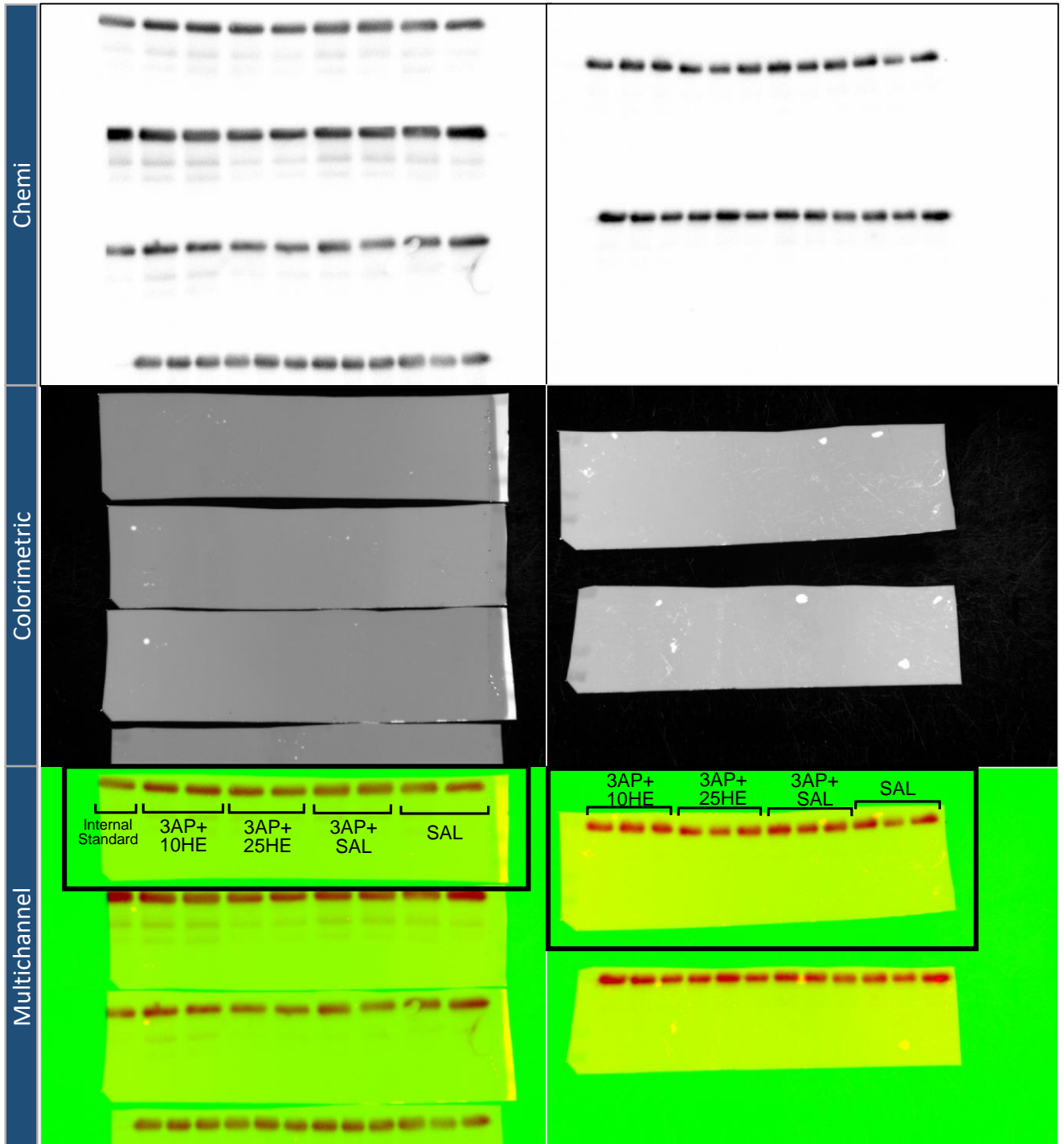
**Figure S5:** Western blot analysis of CREB. The upper left blot is used as a representative figure in the manuscript without including the internal standard.



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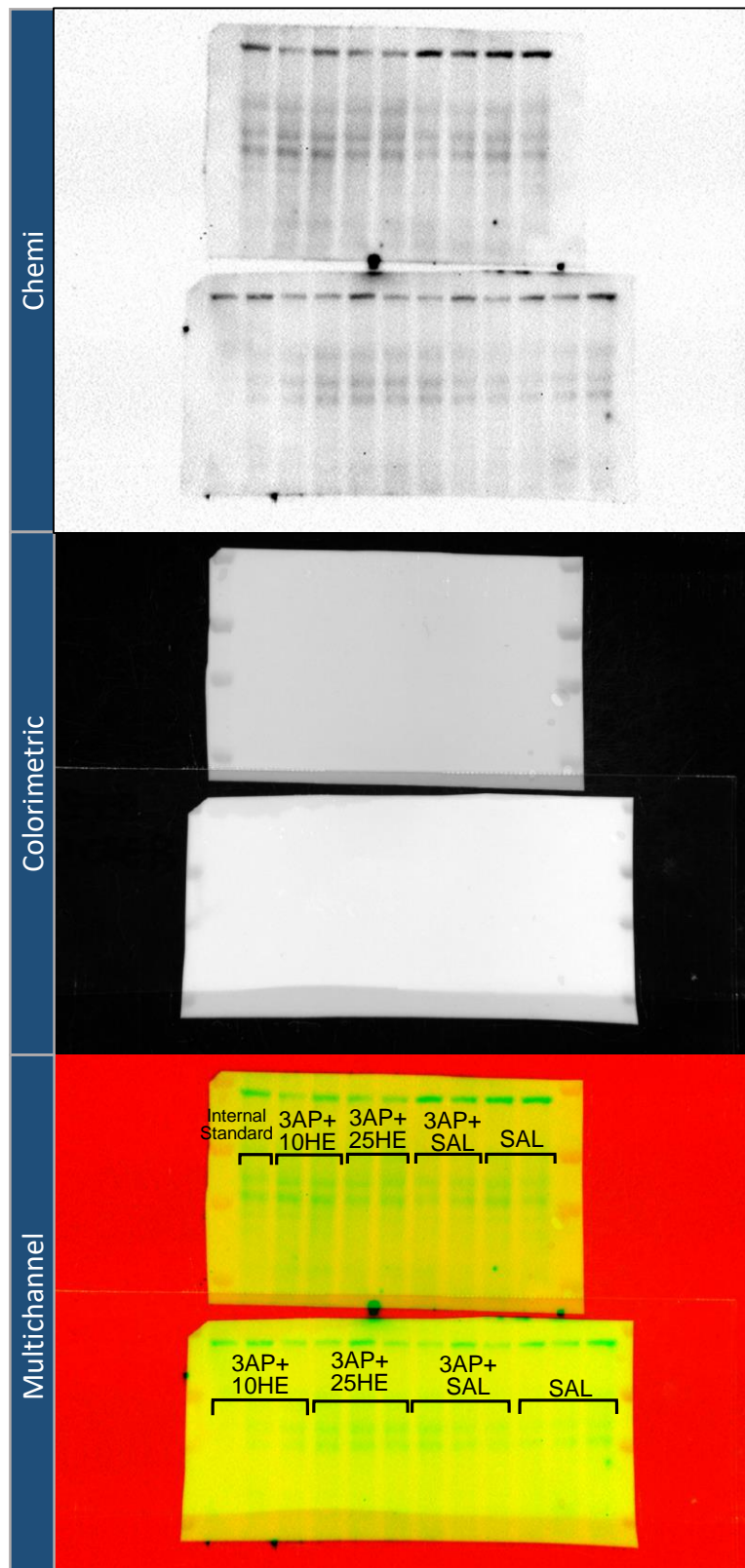


**Figure S6 :** Western blot of GAPDH as a loading control for CREB. More than one membrane were exposed at the same time while the blots of GAPDH were labelled. The top left blot is used as a representative figure in the manuscript without including the internal standard.

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**Supplementary information**

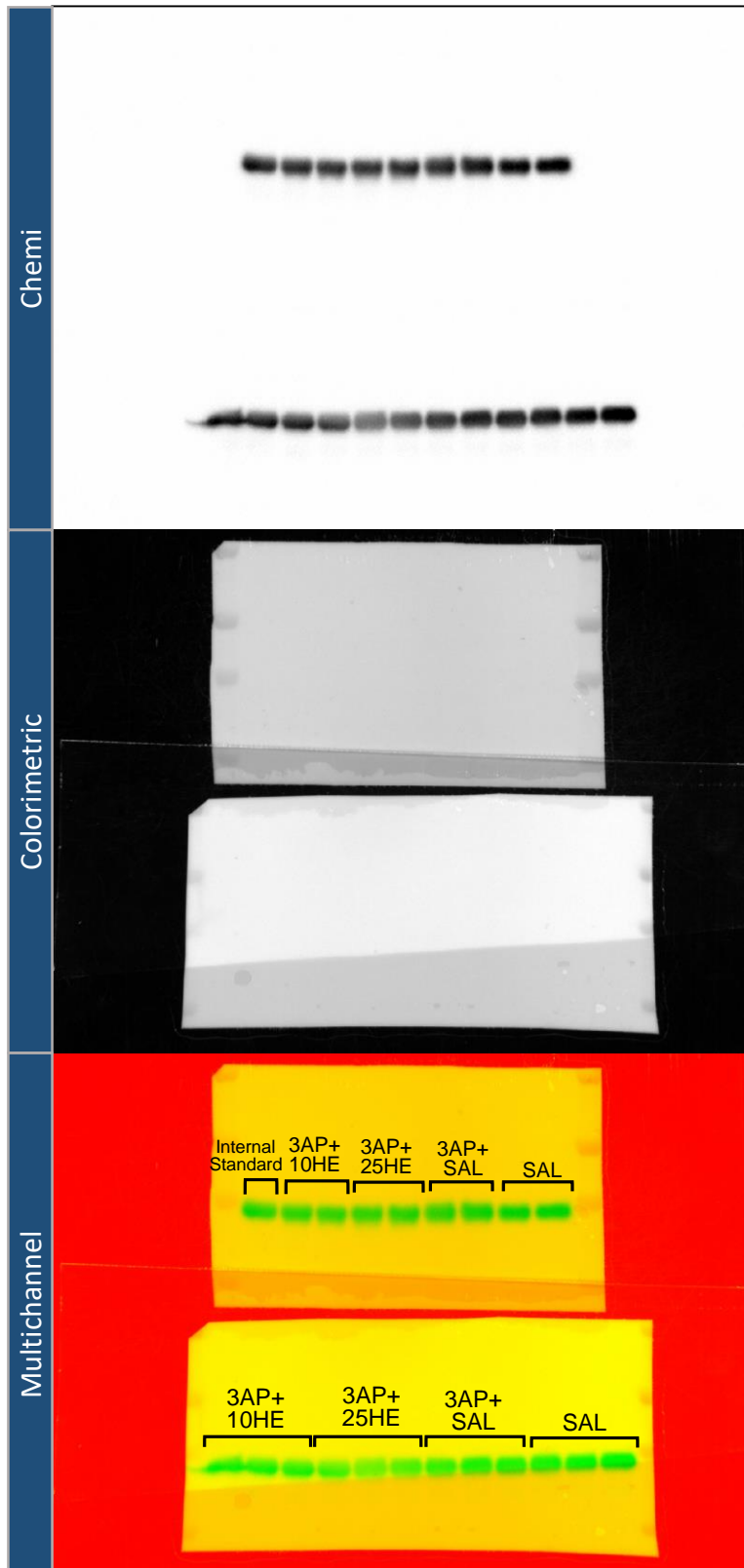


**Figure S7:** Western blot analysis of pCREB. Two blots were exposed and captured in one image. The upper blot is used as a representative figure in the manuscript without including the internal standard.

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**Supplementary information**



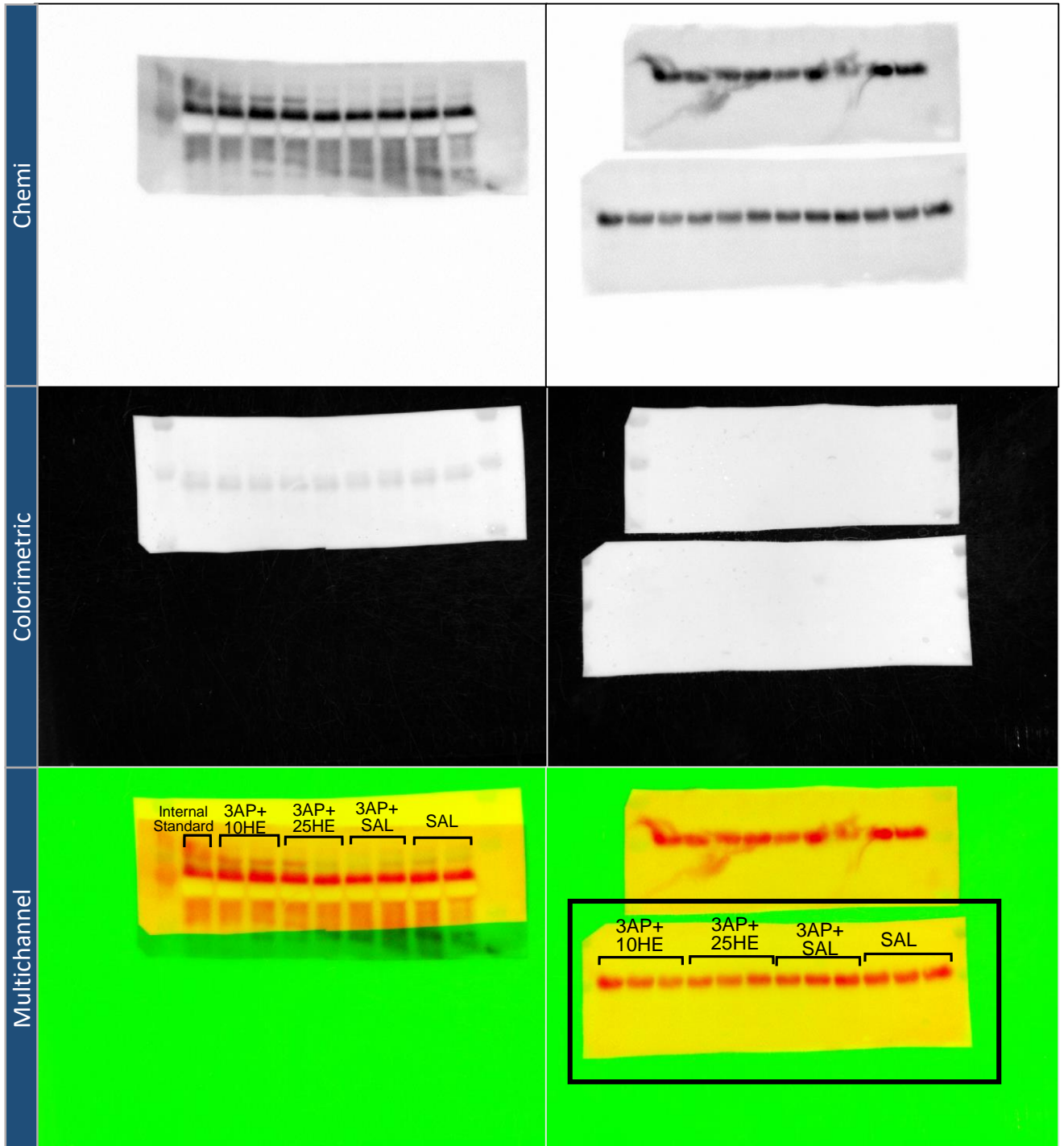
**Figure S8** : Western blot of GAPDH as a loading control for pCREB. . Two blots were exposed and captured in one image. The upper blot is used as a representative figure in the manuscript without including the internal standard.



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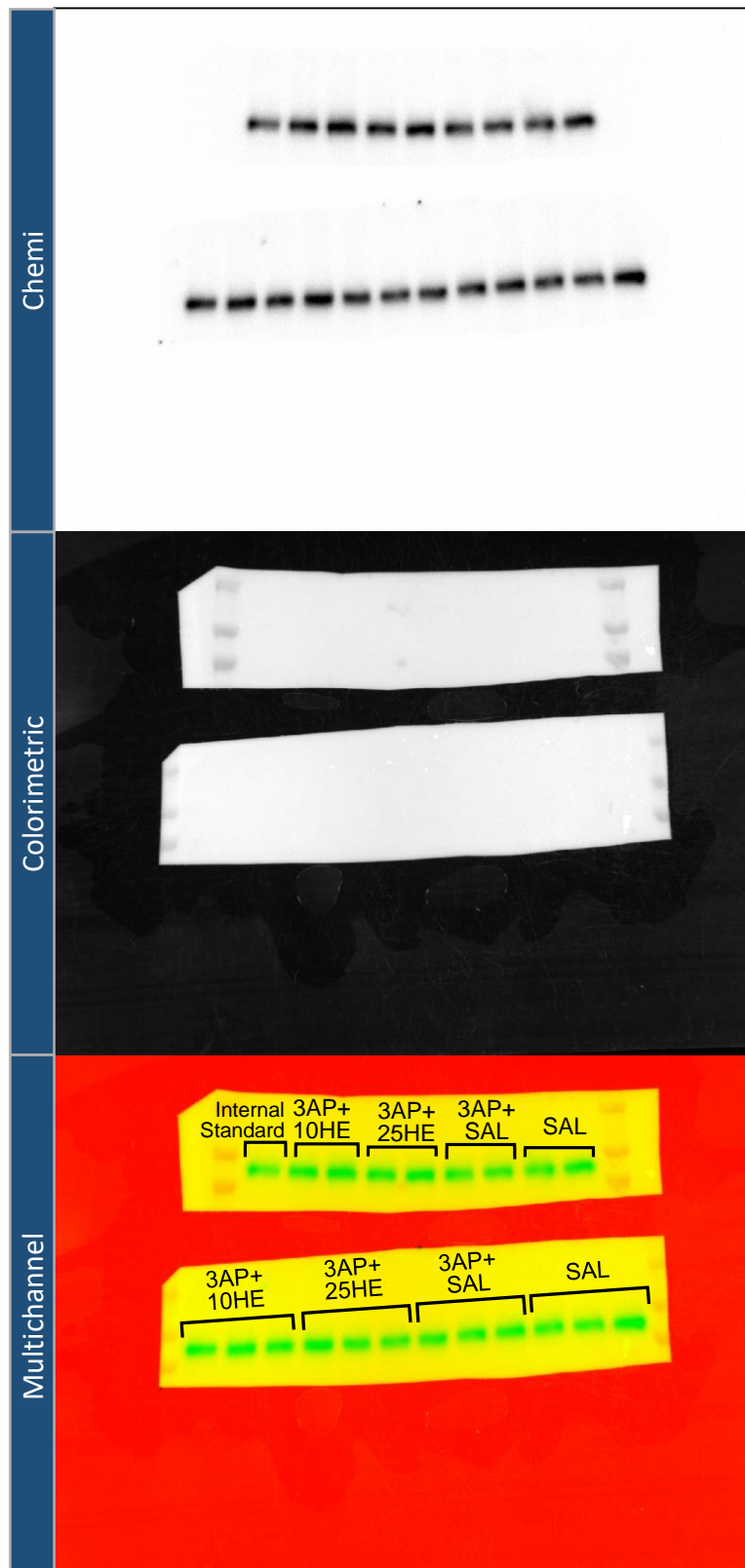


**Figure S9:** Western blot analysis of SYP. The left blot is used as a representative figure in the manuscript without including the internal standard. The left membrane was moved while imaging for colorimetric image, thus the image of multichannel was not merge perfectly.

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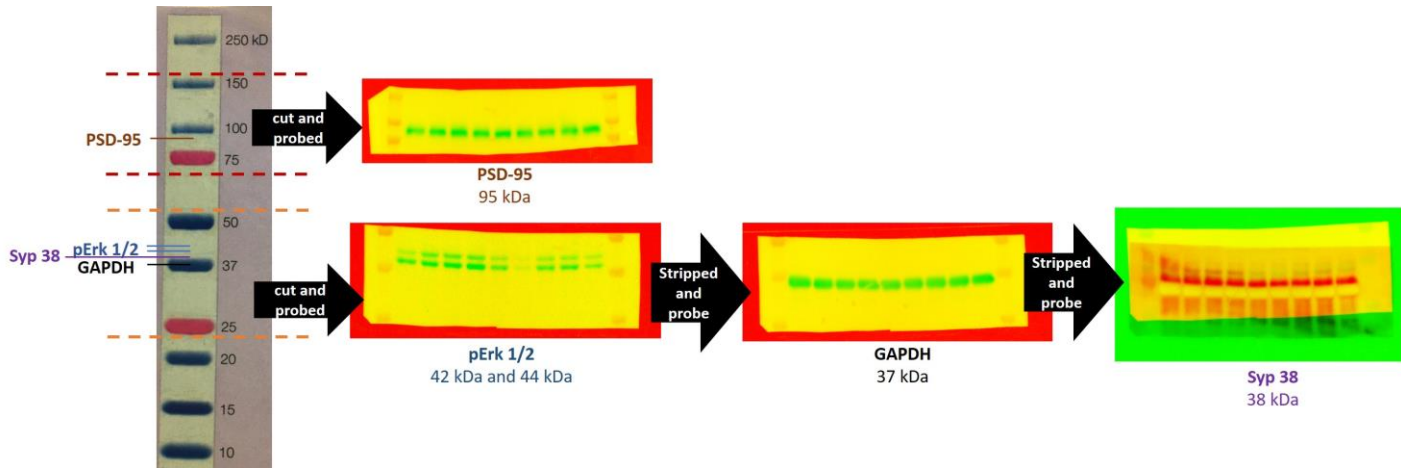


**Figure S10:** Western blot analysis of PSD-95. Four blots were exposed and captured in two image and blots for PSD-95 were labelled. The upper blot is used as a representative figure in the manuscript without including the internal standard.

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**Figure S11: Schematic diagram of the probing process of blot for PSD95, pERK1/2, SYP (Gel 1) and GAPDH.** PSD95, pERK1/2, SYP (Gel 1) and GAPDH were probed from the same blot with the same samples. The membrane was cut for detecting PSD95 and pERK1/2 separately. pERK1/2 were then stripped and probed with GAPDH. SYP (Gel 1) were further probed after stripping the GAPDH.