

## **Additional File 1**

### **Vidarabine, an anti-herpes agent, prevents occlusal-disharmony-induced cardiac dysfunction in mice**

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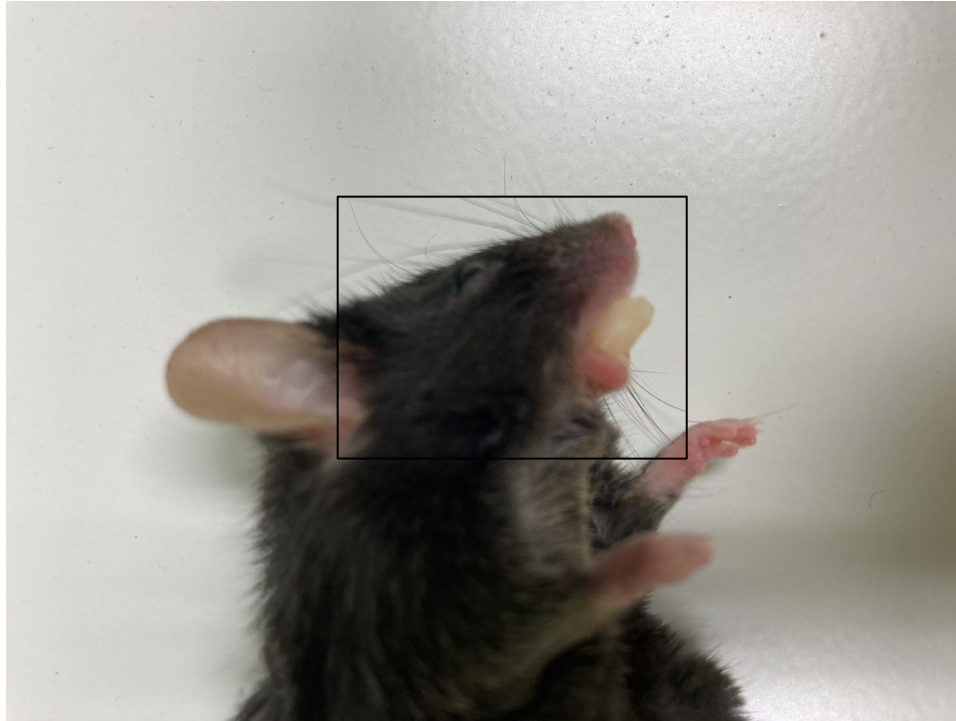
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Department of Physiology, Tsurumi University School of Dental Medicine,

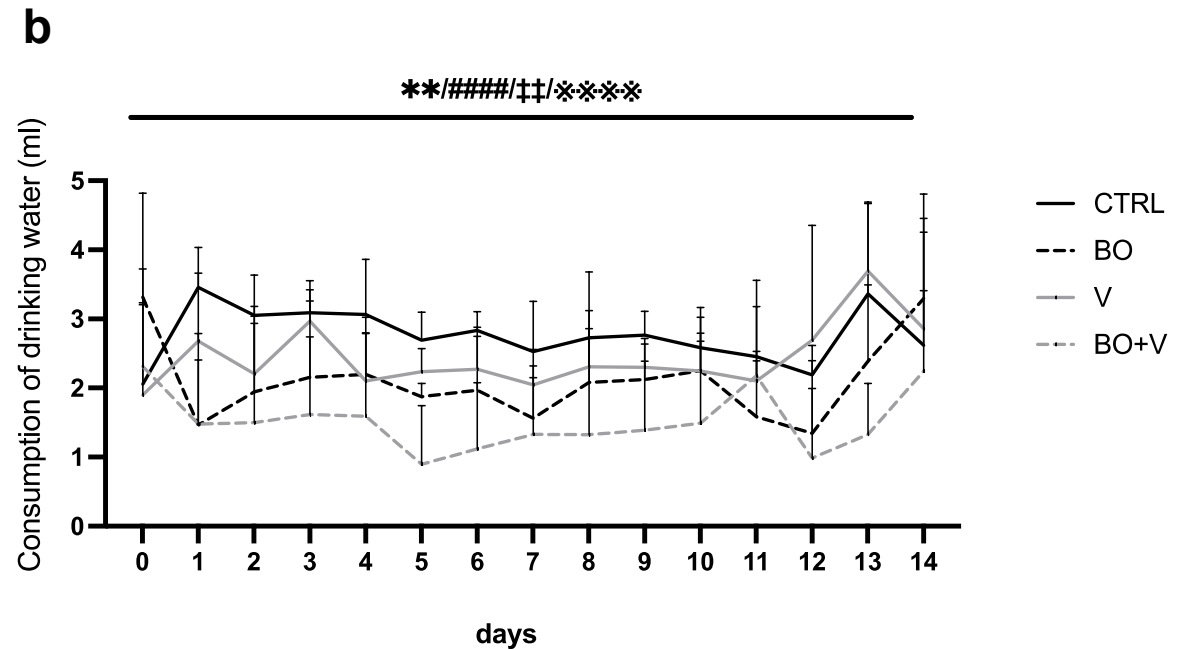
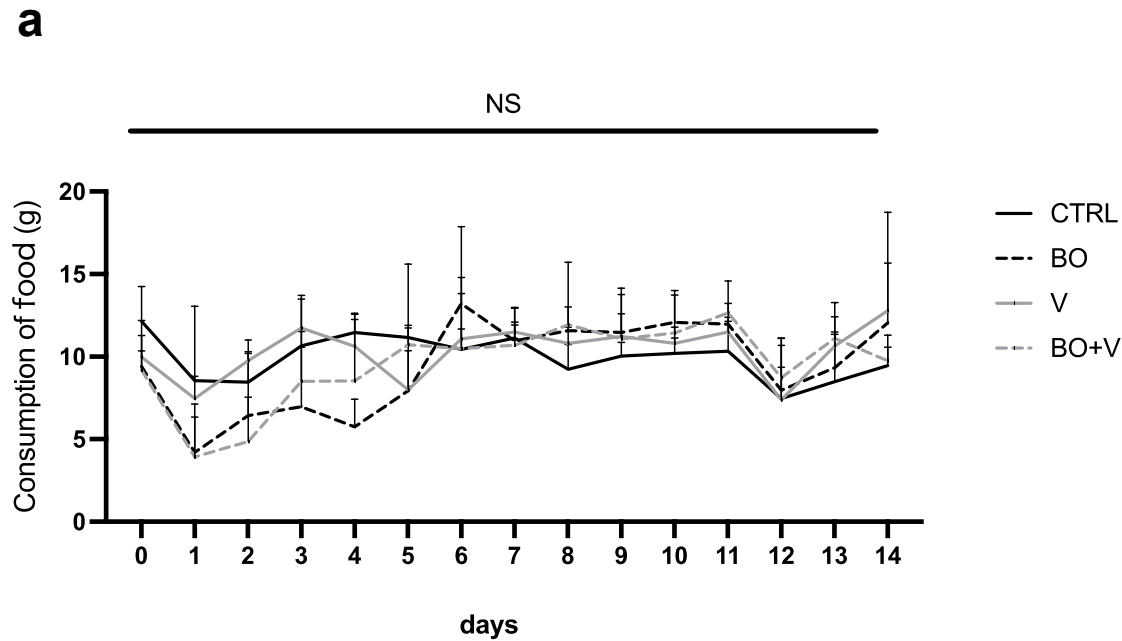
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**Fig. S1**

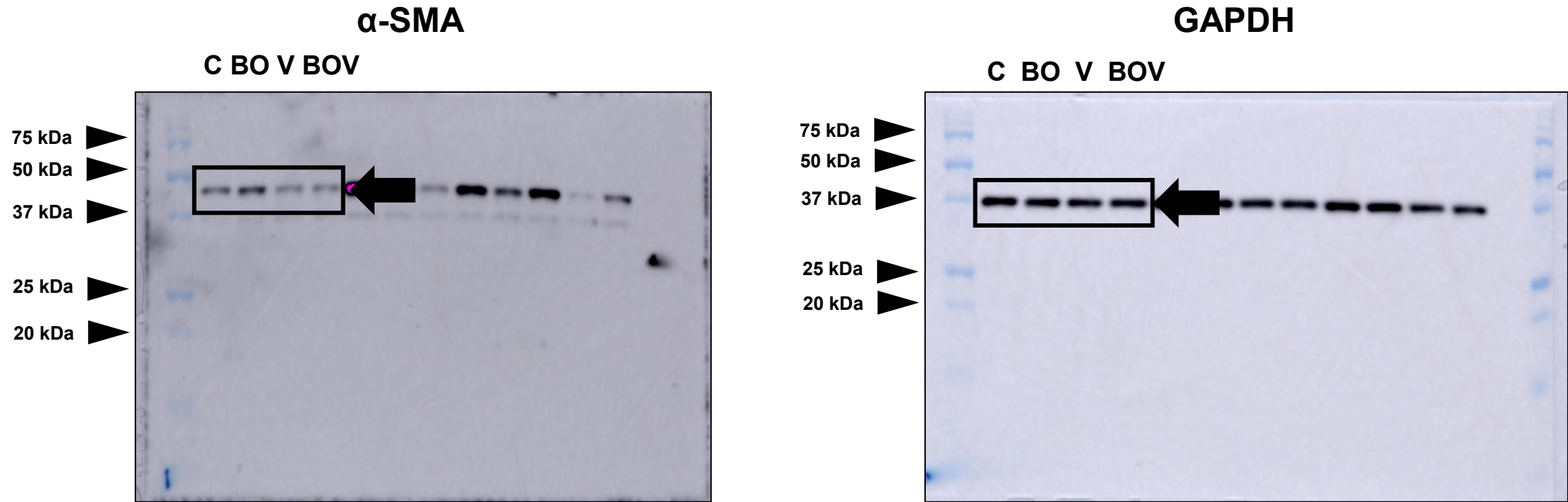
The original photo of **Fig. 1b**. The box outlined in black, indicated by the arrow, corresponds to the cropped part shown in the main article.



CTRL vs. BO : \* \* ( $P < 0.01$ )  
 CTRL vs. BO + V : # # # # ( $P < 0.0001$ )  
 BO vs. V : † † ( $P < 0.01$ )  
 V vs. BO + V : \* \* \* \* ( $P < 0.0001$ )  
 ns: not significantly different  
 (two-way repeated-measures ANOVA by the Bonferroni *post hoc* test)

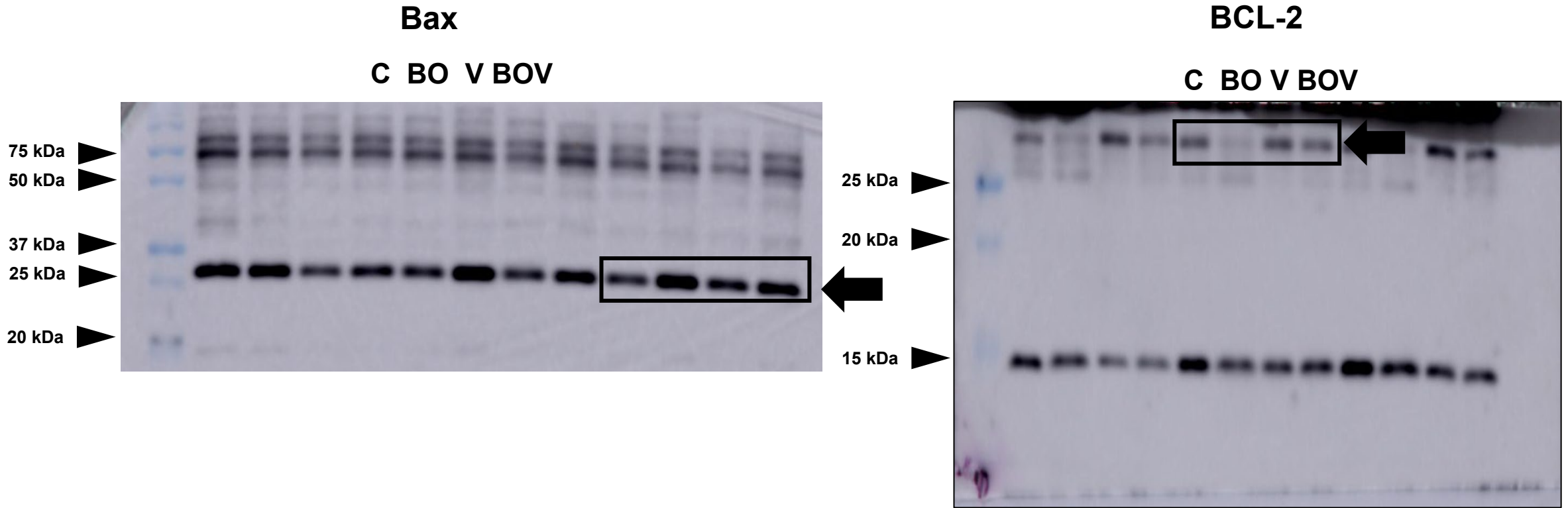
**Fig. S2**

Food consumption and **(a)** and drinking water **(b)** throughout the 2-week experimental period. C: Control, B: BO, V: Vidarabine, BO + V: BO + Vidarabine



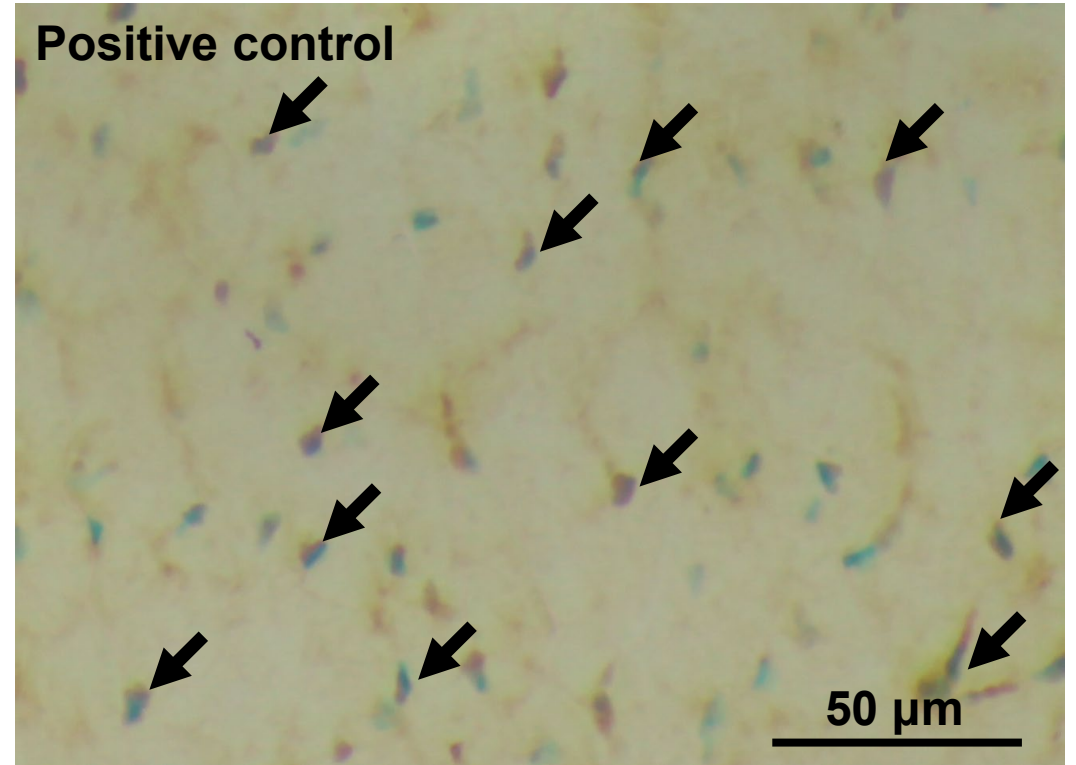
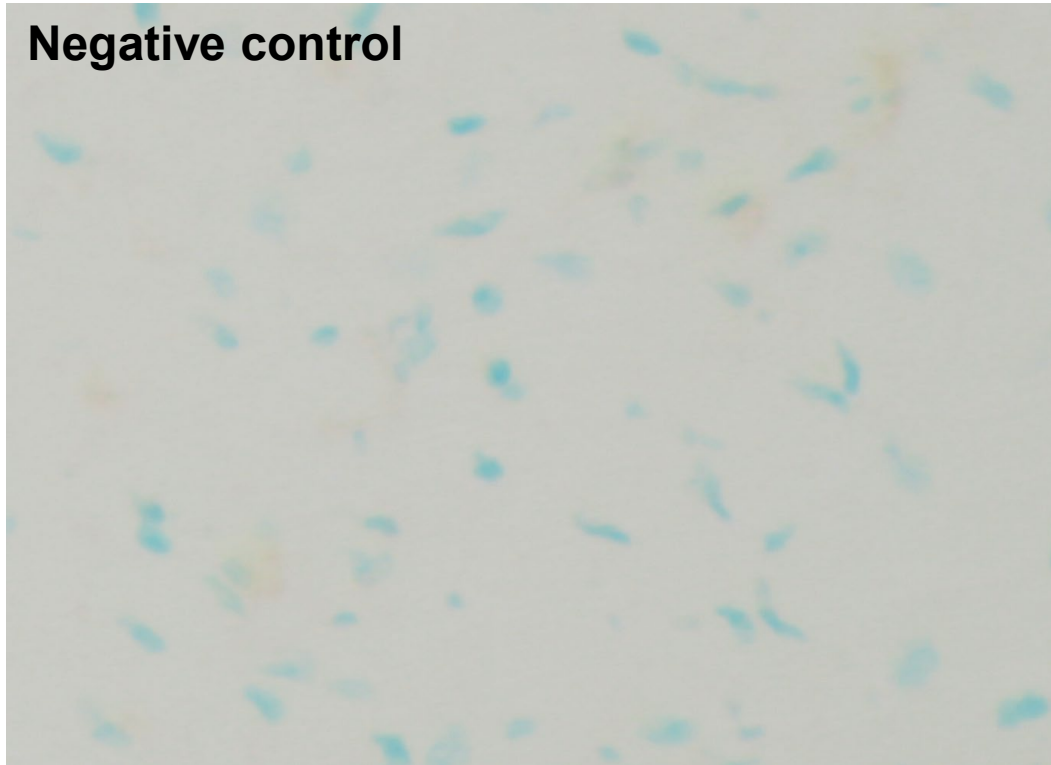
**Fig. S3**

Representative full-length western blotting of **Fig. 2c**. The amounts of activated  $\alpha$ -SMA (left panel) and GAPDH (right panel) are shown. The box outlined in black in each panel, indicated by the arrow, corresponds to the cropped part of the blot shown in the main article. C: Control, B: BO, V: Vidarabine, BOV: BO + Vidarabine



**Fig. S4**

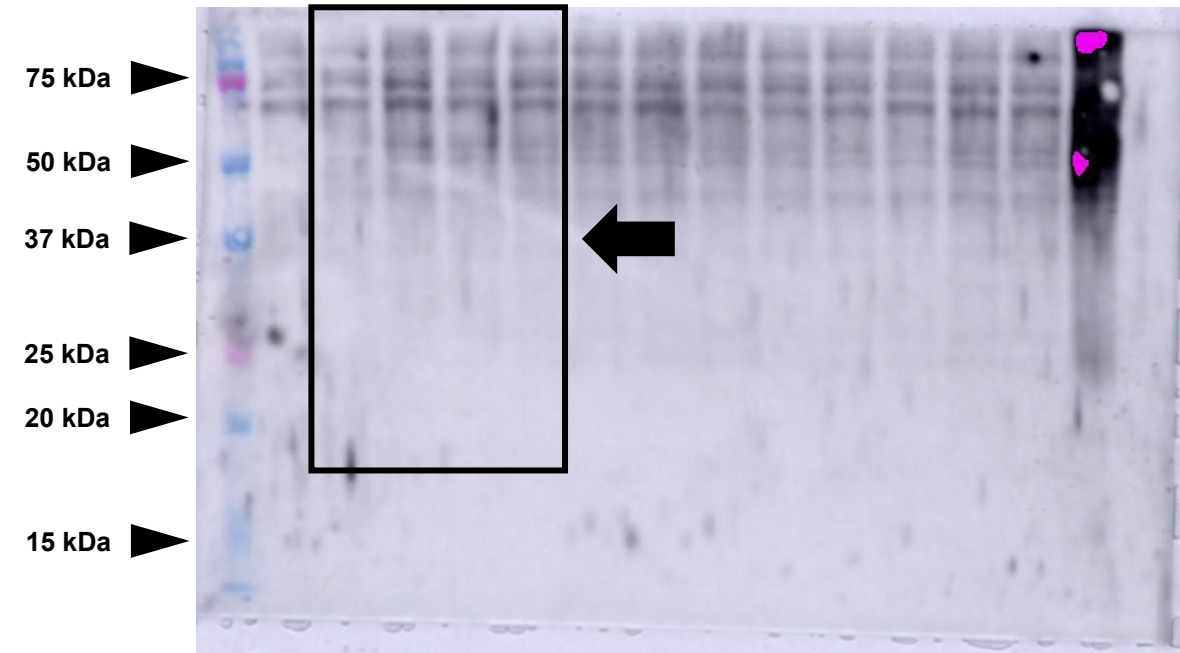
Representative full-length western blotting of **Fig. 3c**. The amounts of Bax (left panel) and BCL-2 (right panel) are shown. The box outlined in black in each panel, indicated by the arrow, corresponds to the cropped parts of the blot shown in the main article. C: Control, B: BO, V: Vidarabine, BOV: BO + Vidarabine



**Fig. S5**  
Representative images of negative (left) and positive (right) controls of 8-OHdG immunostaining.

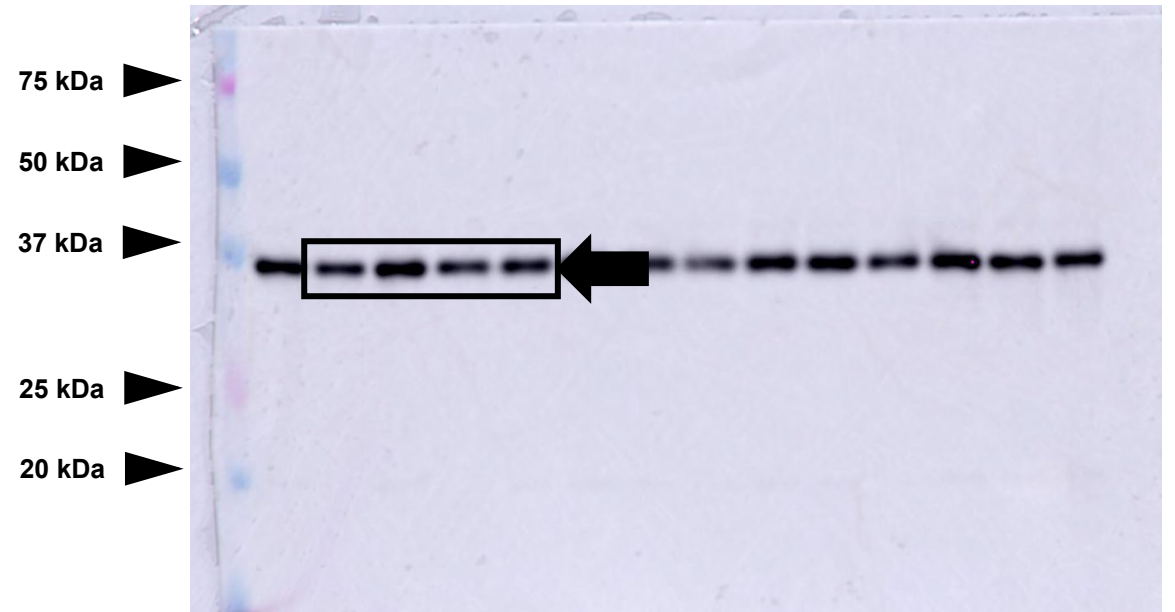
## Oxidized protein

C BO V BOV



## GAPDH

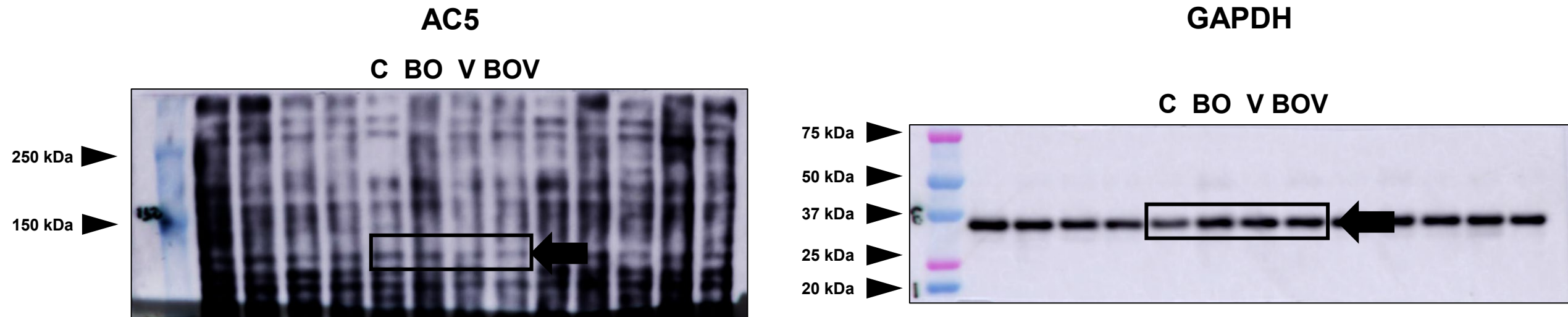
C BO V BOV



### Fig. S6

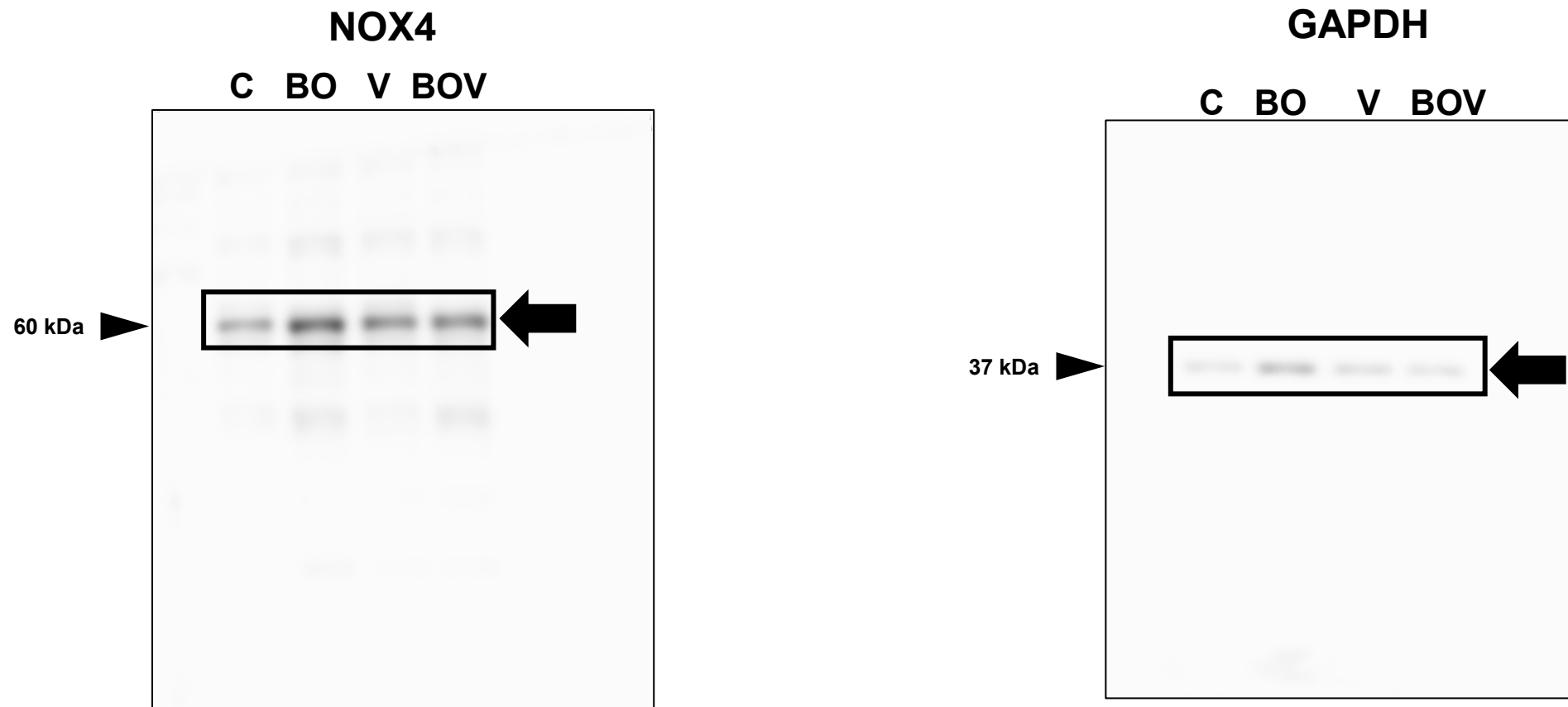
Representative full-length western blotting of **Fig. 4c**. The amounts of activated oxidized protein (left panel) and GAPDH (right panel) are shown. The box outlined in black in each panel, indicated by the arrow, corresponds to the cropped part of the blot. C: control, B: BO, V: Vidarabine, BOV: BO + Vidarabine





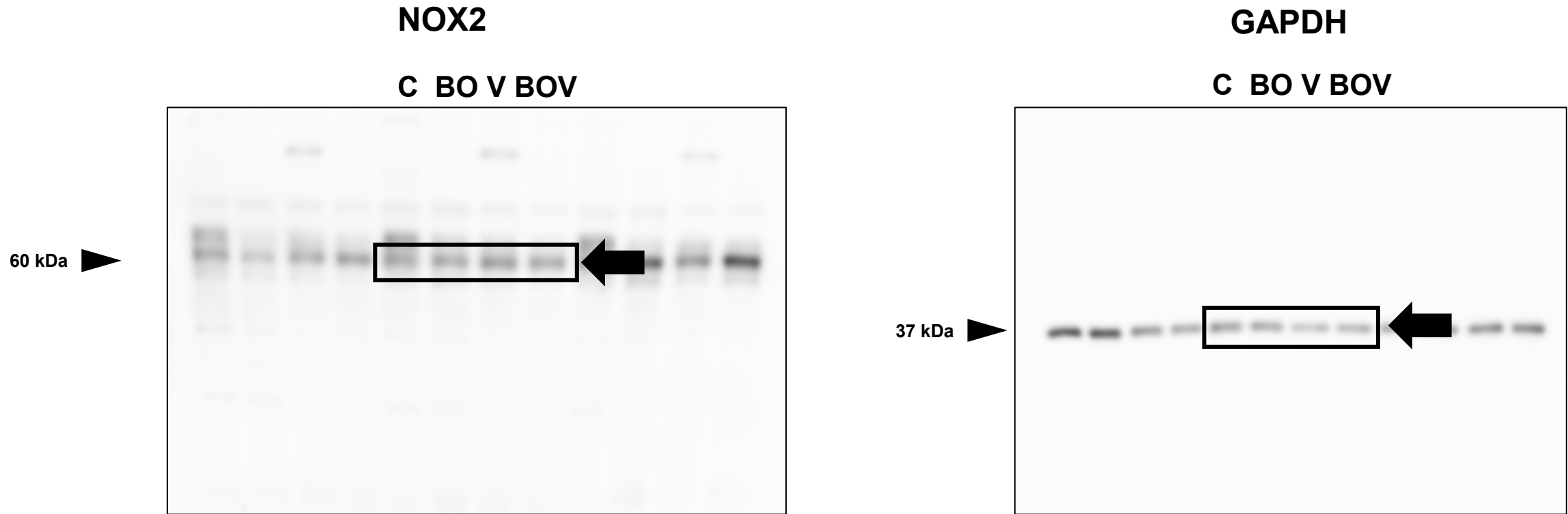
**Fig. S7**

Representative full-length western blotting of **Fig. 5a**. The amounts of AC5 (left panel) and GAPDH (right panel) are shown. The box outlined in black in each panel, indicated by the arrow, corresponds to the cropped part of the blot shown in the main article. C: Control, B: BO, V: Vidarabine, BOV: BO + Vidarabine



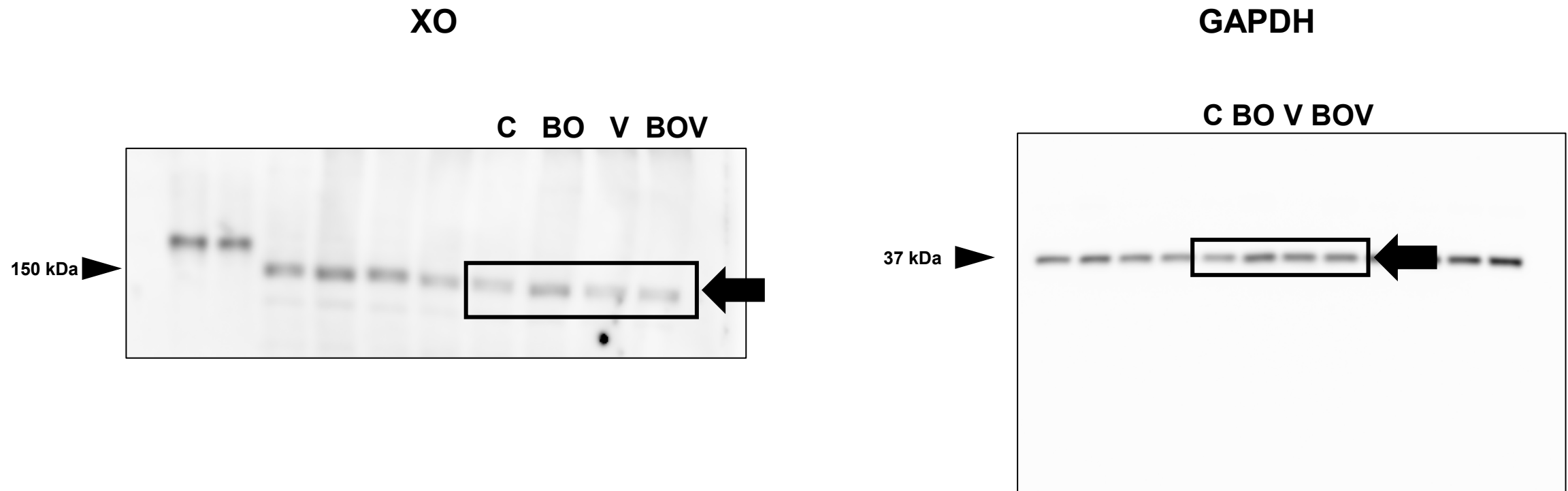
**Fig. S8**

Representative full-length western blotting of **Fig. 5b**. The amounts of NOX4 (left panel) and GAPDH (right panel) are shown. The box outlined in black in each panel, indicated by the arrow, corresponds to the cropped part of the blot shown in the main article. C: Control, B: BO, V: Vidarabine, BOV: BO + Vidarabine

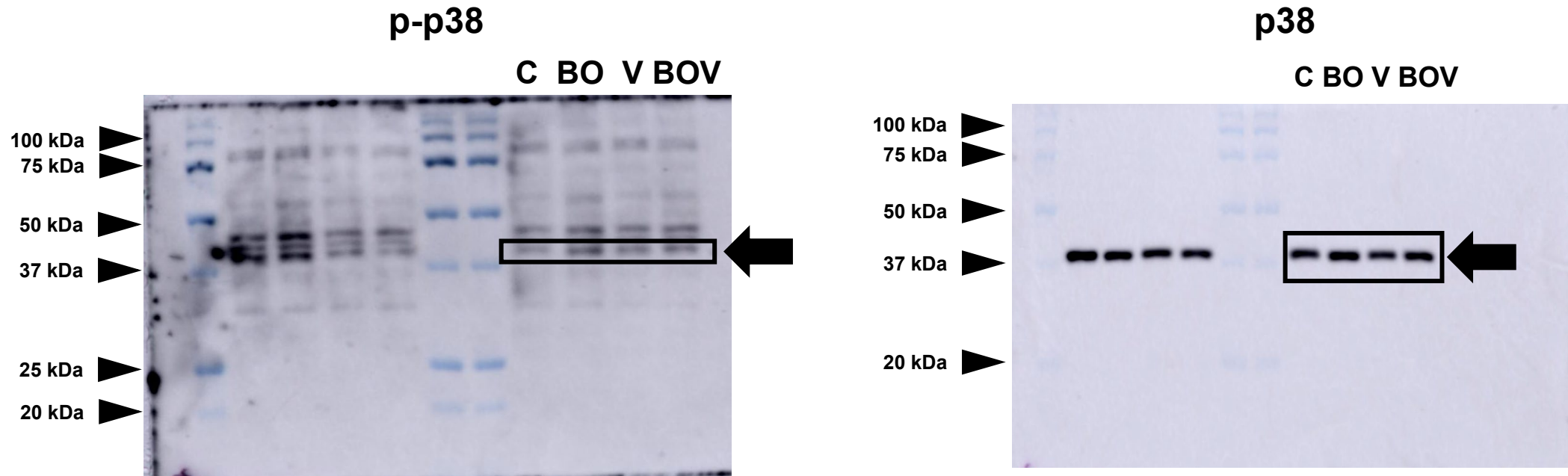


**Fig. S9**

Representative full-length western blotting of **Fig. 5c**. The amounts of NOX2 (left panel) and GAPDH (right panel) are shown. The box outlined in black in each panel, indicated by the arrow, corresponds to the cropped part of the blot shown in the main article. C: Control, B: BO, V: Vidarabine, BOV: BO + Vidarabine

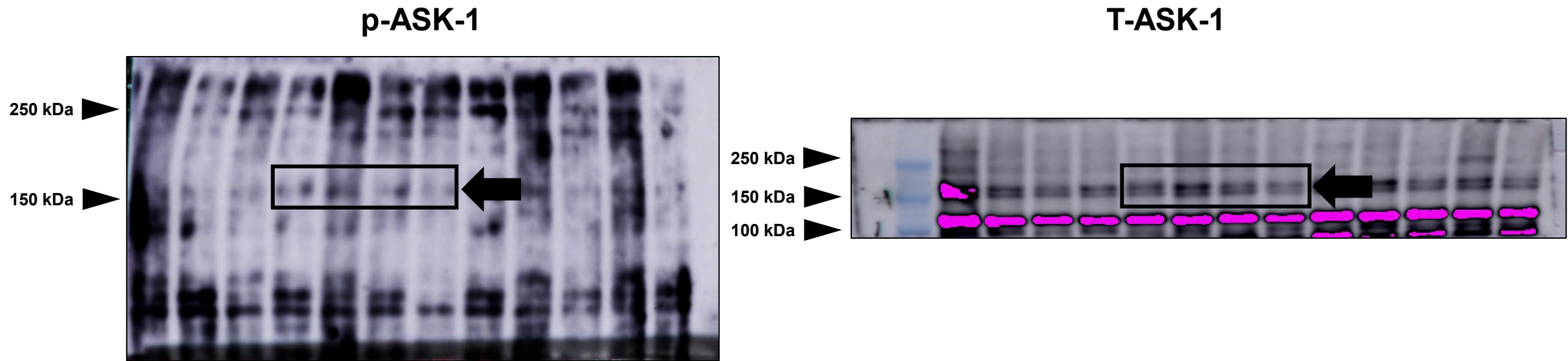


**Fig. S10**  
Representative full-length western blotting of **Fig. 5d**. The amounts of XO (left panel) and GAPDH (right panel) are shown. The box outlined in black in each panel, indicated by the arrow, corresponds to the cropped part of the blot shown in the main article. C: Control, B: BO, V: Vidarabine, BOV: BO + Vidarabine



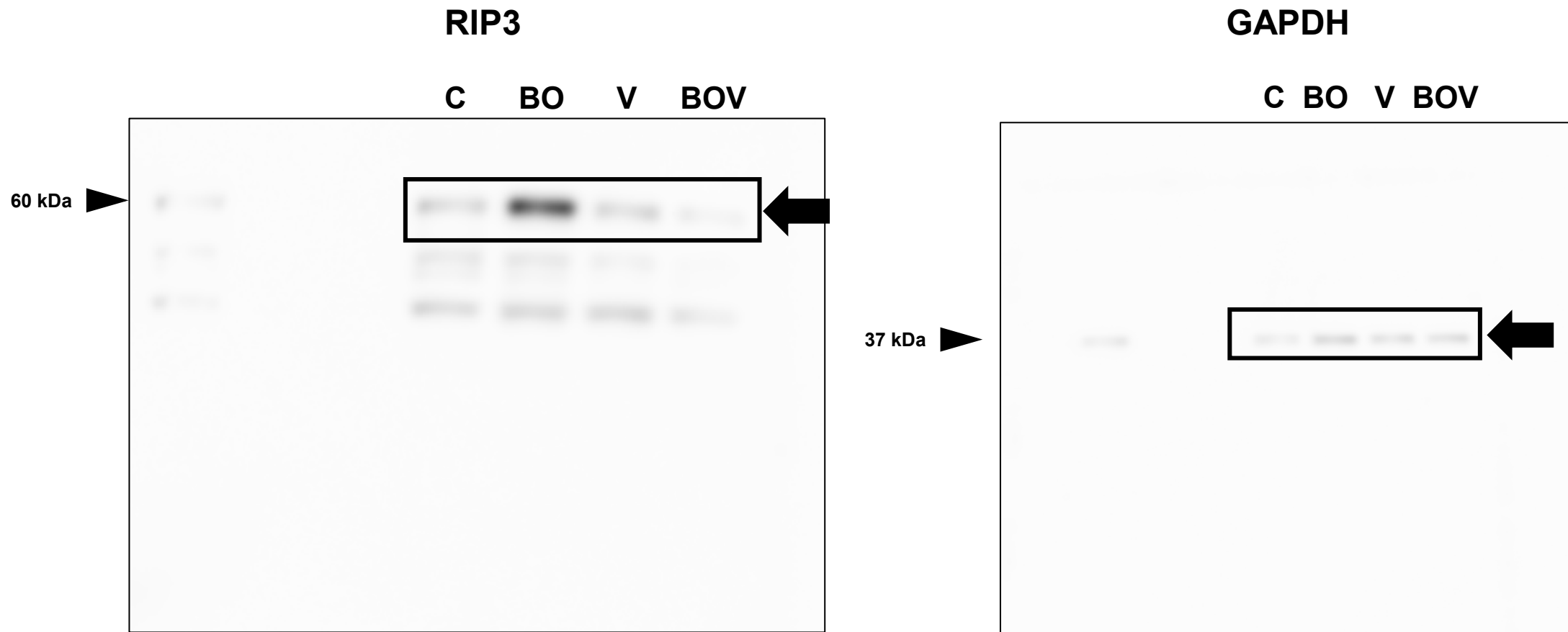
### Fig. S11

Representative full-length western blotting of **Fig. 5e**. The amounts of phosphorylated p38 at Thr-180/Tyr-182 (left panel) and total p38 (right panel) are shown. The box outlined in black in each panel, indicated by the arrow, corresponds to the cropped part of the blot shown in the main article. C: Control, B: BO, V: Vidarabine, BOV: BO + Vidarabine

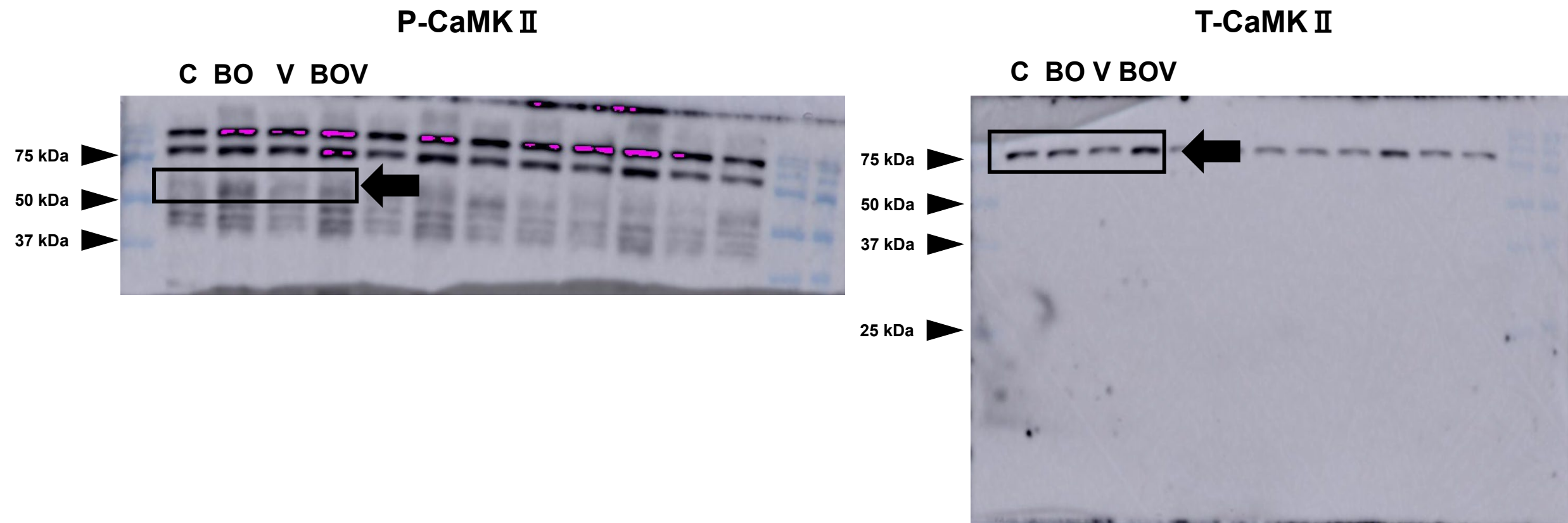


**Fig. S12**

Representative full-length western blotting of **Fig. 5f**. The amounts of phosphorylated ASK-1 at Thr-845 (left panel) and total ASK-1 (right panel) are shown. The box outlined in black in each panel, indicated by the arrow, corresponds to the cropped part of the blot shown in the main article. C: control, B: BO, V: Vidarabine, BOV: BO + Vidarabine



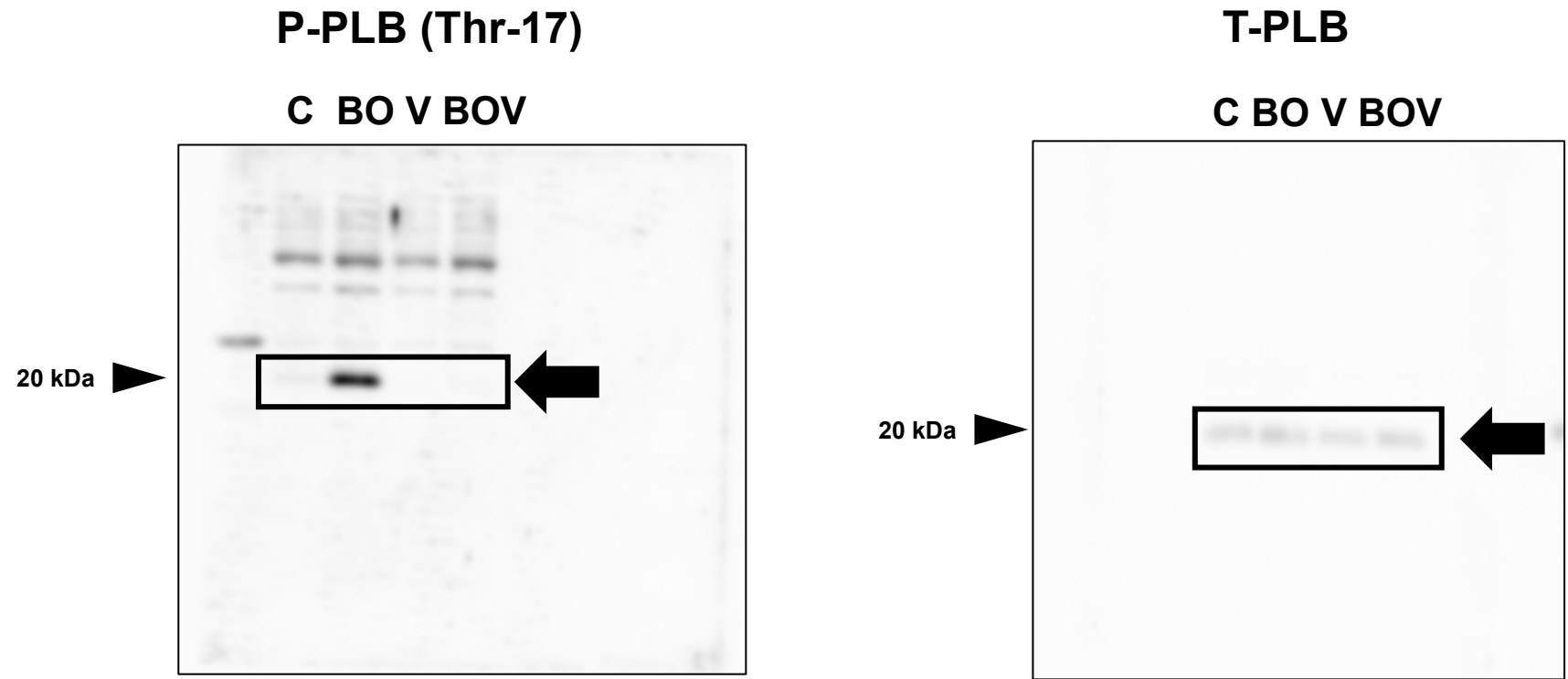
**Fig. S13**  
Representative full-length western blotting of **Fig. 6a**. The amounts of RIP3 (left panel) and GAPDH (right panel) are shown. The box outlined in black in each panel, indicated by the arrow, corresponds to the cropped part of the blot shown in the main article. C: control, B: BO, V: Vidarabine, BOV: BO + Vidarabine



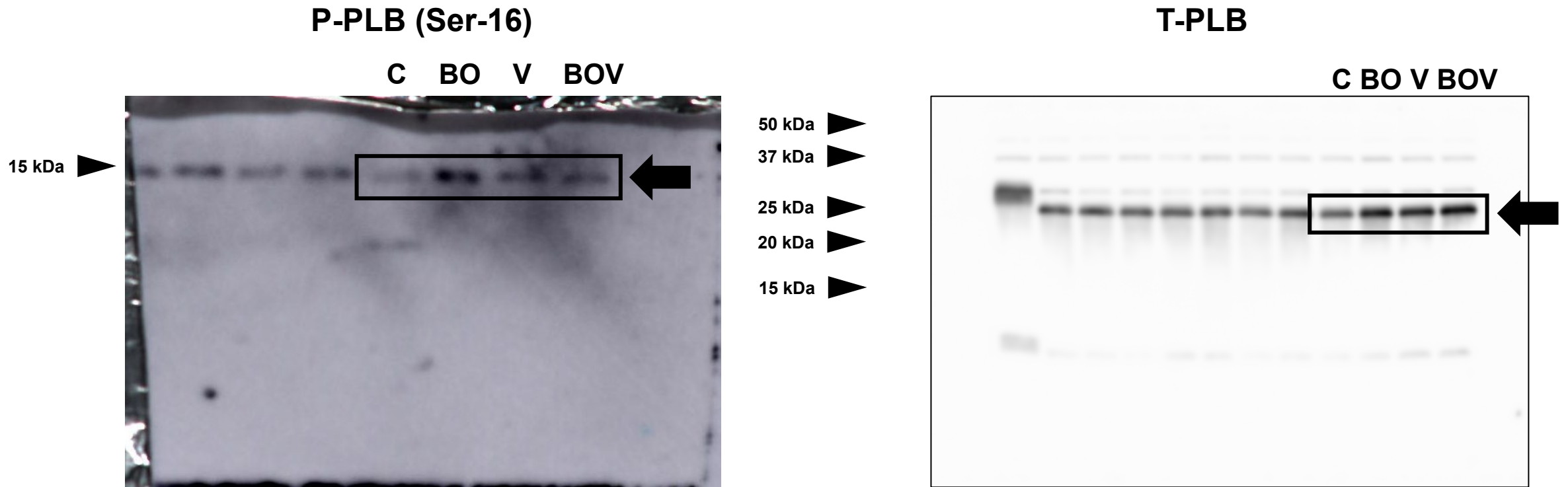
**Fig. S14**

Representative full-length western blotting of **Fig. 6b**. The amounts of phosphorylated CaMKII at Thr-286 (left panel) and total CaMKII (right panel) are shown. The box outlined in black in each panel, indicated by the arrow, corresponds to the cropped part of the blot shown in the main article. C: Control, B: BO, V: Vidarabine, BOV: BO + Vidarabine





**Fig. S15**  
Representative full-length western blotting of **Fig. 6c**. The amounts of phosphorylated PLB at Thr-17 (left panel) and total PLB (right panel) are shown. The box outlined in black in each panel, indicated by the arrow, corresponds to the cropped part of the blot shown in the main article. C: Control, B: BO, V: Vidarabine, BOV: BO + Vidarabine



**Fig. S16**  
 Representative full-length western blotting of **Fig. 6d**. The amounts of phosphorylated PLB at Ser-16 (left panel) and total PLB (right panel) are shown. The box outlined in black in each panel, indicated by the arrow, corresponds to the cropped part of the blot shown in the main article. C: Control, B: BO, V: Vidarabine, BOV: BO + Vidarabine