

SUPPLEMENTARY INFORMATION

PAI-1 protein is a key molecular effector in the transition from normal to PTSD-like fear memory

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18 **Supplementary Figure Legends**

19 **Fig. S1** Corticosterone and restraint stress did not modify the expression of total proteins. **(a)** Western Blot
20 and **(b)** densitometric analysis of α -tubulin protein expression used as a loading control in PC12 cells in
21 response to 100 nM and 1000 nM of Cort for 3 h (180 min). **(c)** Western Blot and **(d)** densitometric analyses
22 of TrkB, Erk1/2^{MAPK} and β III-tubulin proteins from dorsal hippocampal slices extracts of Sprague-Dawley
23 rats incubated with 10 nM and 1000 nM of Cort for 1 h (60 min) and 3 h (180 min). **(e)** Western Blot and **(f)**
24 densitometric analyses of Erk1/2^{MAPK} and β III-tubulin protein expressions used as a loading control from
25 dorsal hippocampus extracts from C57BL/6J mice in response to 30 min, 1 h (60 min) and 3 h (180 min)
26 restraint stress. Dunnett's multiple comparisons *post-hoc* test after ANOVA, all p =ns. Plotted values are means
27 +/- sem.

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29 **Fig. S2** The development of PTSD-like memory is not associated with changes in total proteins. Densitometric
30 analyses of the expression of Erk1/2^{MAPK} protein in the dorsal hippocampus at different times after the
31 conditioning sessions **(a)** and expressed as area under the curve encompassing the 24 h of analysis **(b)**.
32 Example of the Western Blot used for protein quantification after normalization with the level of β III-tubulin
33 **(c)**. Immediately after the conditioning session animals received an injection of either vehicle (Veh; NaCl
34 0.9% i.p., white symbol) or of Cort (2 mg/kg i.p., black symbol). Grey symbol, control animals that were
35 manipulated but not exposed to conditioning. Student's t-test and Sidak's multiple comparisons *post-hoc* test
36 after ANOVA, all p =ns. Plotted values are means +/- sem.

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