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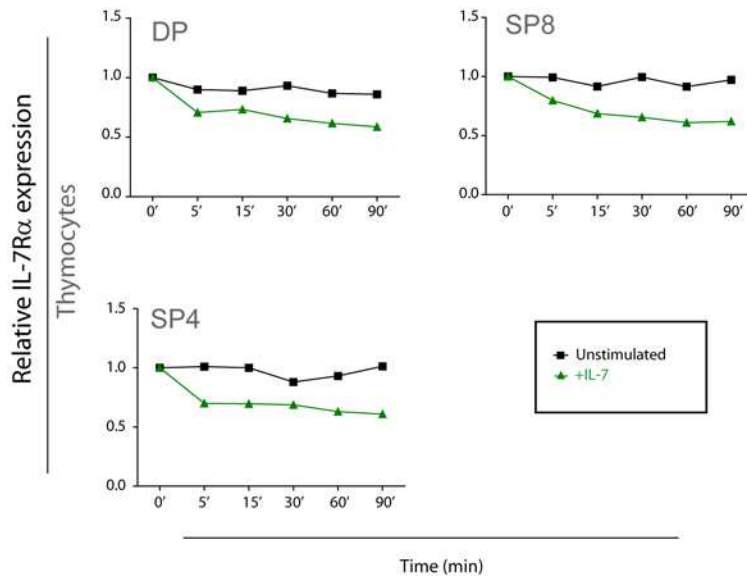
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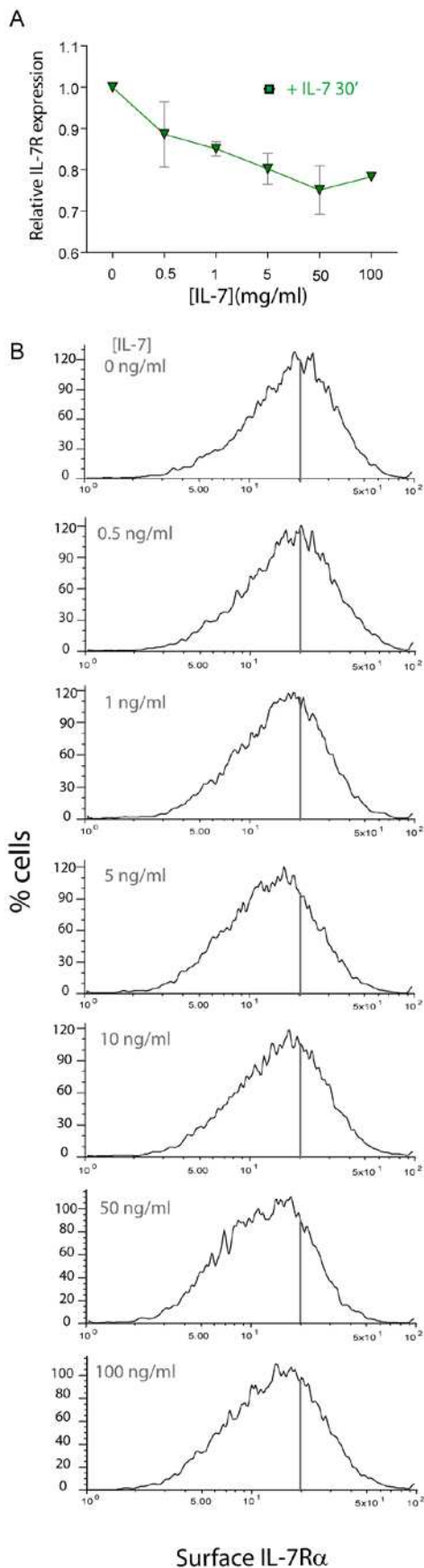


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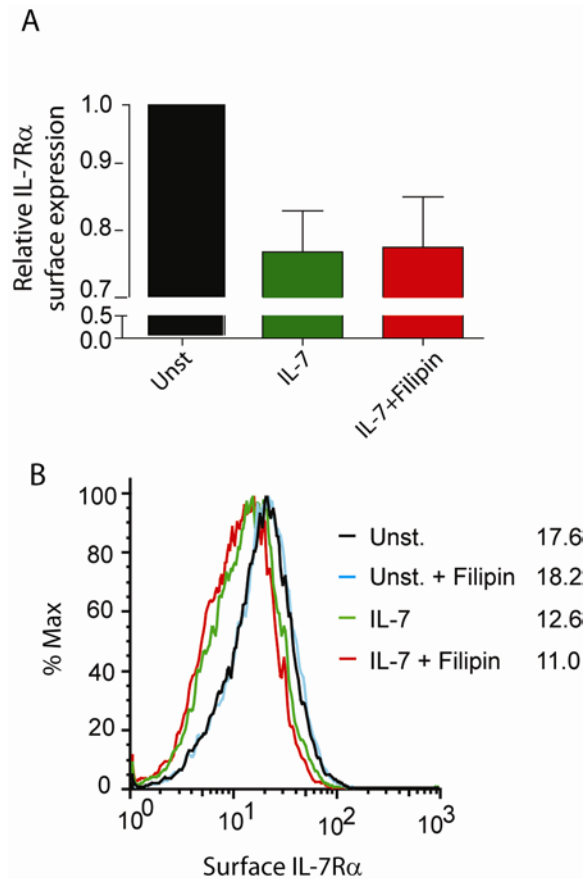
## SUPPLEMENTARY FIGURES



**Supplementary Figure 1. IL-7 induces rapid IL-7R $\alpha$  down-regulation in primary thymocytes:** Primary thymocytes were isolated and cultured in the presence or absence of IL-7 (50ng/ml) in culture medium for the indicated time and subsequently analyzed by flow cytometry for surface IL-7R $\alpha$  expression, as described in 'Materials and Methods'. Thymocytes were incubated with anti-CD4 FITC-conjugated and CD8 APC-conjugated antibodies to determine the double positive (DP), CD4 single positive (SP4) and CD8 single positive (SP8) sub-populations. Relative IL-7R $\alpha$  expression was calculated as the geometric mean intensity of fluorescence normalized to the zero (unstimulated) time point. Results are representative of two independent thymuses.



**Supplementary Figure 2. IL-7 induces surface IL-7R $\alpha$  downregulation in a dose-dependent manner.** (A) HPB-ALL cells were cultured in the presence of increasing doses of IL-7 (0 to 100ng/ml) in culture medium for 30 minutes and subsequently analyzed by flow cytometry for surface IL-7R $\alpha$  expression, as described in ‘Materials and Methods’. Relative IL-7R $\alpha$  expression was calculated as the geometric mean intensity of fluorescence normalized to the zero (unstimulated) time point. Data are mean $\pm$ sem from two independent experiments. (B) Representative flow cytometry histograms of IL-7R $\alpha$  surface expression in HPB-ALL cells stimulated for 30 minutes with IL-7 at the indicated concentrations. The vertical line in each histogram was arbitrarily set at the same value in all histograms to facilitate their visual comparison.



**Supplementary Figure 3. IL-7-induced-IL-7R $\alpha$  internalization is lipid-raft independent.** (A) HPB-ALL cells were cultured in the presence or absence of IL-7 (50ng/ml), with or without pre-treatment (1h) with the lipid-raft inhibitor Filipin (5 $\mu$ g/ml). Samples were analyzed by flow cytometry for surface IL-7R $\alpha$  expression, as described in ‘Materials and Methods’. Relative IL-7R $\alpha$  expression was calculated as the geometric mean intensity of fluorescence normalized to the zero (unstimulated) time point. Data are mean $\pm$ sem from two independent experiments. (B) Representative flow cytometry histogram overlay of IL-7R $\alpha$  surface expression in HPB-ALL cells stimulated for 30 minutes with IL-7 (50ng/ml), with or without 1h of pre-treatment with Filipin (5 $\mu$ g/ml). The indicated values correspond to the geometric mean intensity of fluorescence for each condition.