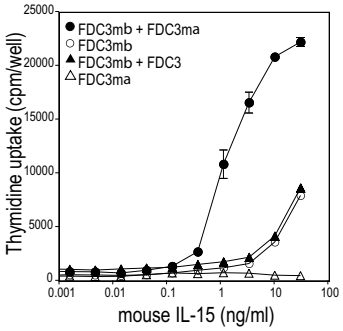
Supplementary Figure Legends

Supplementary Figure 1. *Trans* presentation of IL15 by cellular mIL15Rα enhanced the proliferation of FDC3 cells expressing mRβ. Thymidine uptake was measured in FDC3 cells expressing mRβ (open circles), FDC3 cells expressing mIL15Rα (open triangles), a mixed culture of FDC3 cells expressing mRβ and FDC3 cells expressing mIL15Rα (closed circles), and a mixed culture of FDC3 cells expressing mRβ and untransfected FDC3 cells (closed triangles). The data shown are representative results of more than three experiments.

Supplementary Figure 2. The complex of soluble mIL15Rα–mIL15 enhanced the proliferation of FDC3 cells expressing mRβ, similar to their response to mIL15 + soluble mIL15Rα. Thymidine uptake was measured in FDC3 cells expressing mRβ stimulated with either mIL15 alone (open circles), mIL15 + soluble mIL15Rα (closed circles), or with a purified preformed complex of soluble mIL15Rα and mIL15 (closed triangles). When the cells were stimulated with the complex, the amount of protein was adjusted based on the amount of mIL15. The data shown are representative results of

more than two experiments.

Supplementary Figure 3. The enhanced mIL15 response induced by soluble mIL15Rα was observed in both activated and naive CD8 T cells. Thymidine uptake was measured in ConA-stimulated or naïve CD8 T cells cultured with either mIL15 alone (open circles) or mIL15 + soluble mIL15Rα (closed circles). The data shown are representative results of more than two experiments.



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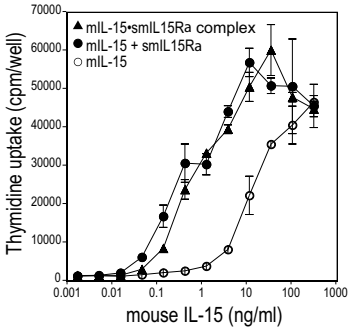

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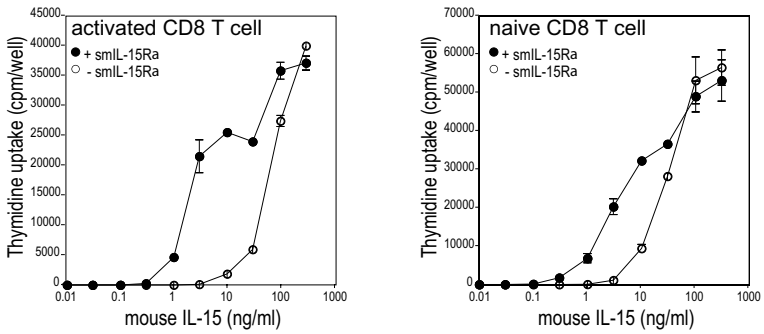

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Supplementary Table I. Summary of the Responses of FDC3 Cells to Mouse and Human IL15

Receptor expressed by FDC3	IL15	Soluble IL15Rα	EC_{50} (ng/mL)
mRα/β	mouse	none	0.03
		mouse	0.3
		human	3.2
	human	none	0.007
		mouse	3.0
		human	3.5
mRβ	mouse	none	2.4
		mouse	0.6
		human	3.0
	human	none	4.2
		mouse	4.0
		human	5.0
hRα/β	human	none	0.003
		mouse	3.0
		human	0.4
hRβ	human	none	1.2
		mouse	1.4
		human	0.1

Mouse IL15 did not stimulate FDC3 cells expressing human receptors.