

Pathways to effector T cell development

Naïve T cells differentiate into effector T cells with enhanced functional potential for orchestrating pathogen clearance largely under the guidance of cytokines produced by cells of the innate immune system that have been activated by recognition of those pathogens. This “secondary” education of post-thymic T cells provides a mechanism for appropriately matching adaptive immunity to cues of the innate immune system. Recently, factors that specify the differentiation of a new effector T cell lineage – Th17 – have now been identified, providing a new arm of adaptive immunity and presenting a unifying model that can explain many heretofore confusing aspects of immune regulation, immune pathogenesis and host defense. An update on Th17 development and function, and consideration of the close links of Th17 development to regulatory cell development will be discussed.

References

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