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SUPPLEMENTAL MATERIALS FOR ONLINE REPOSITORY

A Molecular Perspective on Th2-Promoting Cytokine Receptors in Allergic Disease

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Funding Sources: This work was supported by grants from NIH/NIAID (R01 AI-052196) and NIH/NIAMS (R01 AR-059058).

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19 **Legends to Figures**20 **Figure E1. Sequence Similarity Among Structurally Conserved Regions of TSLP, IL-4 and**21 **IL-13.** Sequence alignments for TSLP, IL-4 and IL-13, and related IL-2 subfamily members

22 (IL-2 and IL-7), within alpha helices A, C and D. Alpha helices were determined from X-ray

23 structural data for IL-4 (PDB: 1ITM) and IL-13 (PDB: 1IJZ) and from prediction of the

24 secondary structure for TSLP (JPred prediction algorithm). Colored regions denote sequence

25 identity or similarity. Black highlighted residues denote conserved hydrophobic core residues.

26 Underline denotes a region containing 3 basic residues (KKR) corresponding to a “hotspot” for

27 IL-13 binding to IL-13R α 1 and IL-13R α 2. TSLP contains 3 basic residues at this site (RRR).

Helix A

IL-2 -TKKTQLQLEHLLDQMILNGI
 IL-7 -----KQYESVIMVSDQLLDS-
 IL-4 -----ITLQELIKTNSLTE--
 IL-13 ----PSTALREIEEIVNITQ--
 TSLP FEKIKAAVLSISKDLITYM---

Helix C

IL-2 -----PRDLISNINVIVLEIK---
 IL-7 -----FDLHLKLVSEGTTILIN---
 IL-4 AQQFHRHKQLPFLKRLDRNHWGLA
 IL-13 -----AIEKTQRMISGFC
 TSLP -----AKEMFAMKTKAATATW---

Helix D

IL-2 ---IVEFLNRWITFCQSIIST--
 IL-7 ---L CFLKRILQEI KTCWNKIL
 IL-4 ---LENFLERIKTIMREKYSKC-
 IL-13 KIEVAQFVKDILLHLK KLFRE--
 TSLP -NKCLEQVSOIQGLWRFRNRPIL