

Organ	Pathology review of TSLP-AAV versus Ctrl-AAV-injected mice
Lung	Moderate inflammation: H&E sections of the lung show inflammatory cuffing of the arteries and arterioles in mice given TSLP-AAV. The infiltrate consists mostly of lymphocytes and eosinophils, with rare giant cells. No arteritis or necrosis is present. Bronchioles show focal mild cuffing with lymphocytes and eosinophils. The lung parenchyma is relatively spared.
Liver	Moderate inflammation: H&E sections of the liver show increased portal inflammation and cuffing of central venules in mice given TSLP-AAV. The inflammatory infiltrate consists mostly of lymphocytes and eosinophils. No plasma cells or granulomas are present. No arteritis or necrosis is present. There is no apparent bile duct injury. There are focal collections of approximately 10-20 lymphocytes scattered throughout the parenchyma. No steatosis is present.
Kidney	No inflammation: There are no apparent differences between the mice. On light microscopy (H&E, PAS, and Jones methenamine silver), there are no glomerular changes including mesangial expansion or hypercellularity, endocapillary hypercellularity, segmental sclerosis, hyaline thrombi, or crescent formation. No global glomerulosclerosis is noted. No holes, spikes, or duplication are seen on silver stain, suggesting no immune complex deposition. Vessels show no arteriosclerosis or hyalinosis, and no vasculitis. No interstitial fibrosis or tubular atrophy is present. No acute tubular injury is seen. There are no casts. Immunofluorescence was performed on the formalin-fixed paraffin-embedded tissue following protease digestion for IgG, IgA, IgM, C3, C1q, and kappa and lambda light chains. No deposits are seen. There is no evidence of immune complex mediated disease.
Small Intestine	No inflammation: There are no apparent differences between the mice on H&E sections of the small intestine. No villus blunting is seen, and there are no apparent neutrophils in the lamina propria. Less than 1 intraepithelial lymphocyte is seen per 5 epithelial cells (normal range).
Colon	No inflammation: There are no apparent differences between the mice on H&E sections of the colon. No crypt distortion, cryptitis, or mucin depletion is present. Less than 1 intraepithelial lymphocyte is seen per 5 epithelial cells (normal range).
Skin	Mild inflammation: H&E sections of the skin show no impaired barrier function. There is no hyperkeratosis or parakeratosis, epidermal acanthosis, spongiosis, or microvesicles. There is no increased infiltration of lymphocytes in the epidermis or dermis. However, the dermis contains scattered eosinophils in mice given TSLP-AAV. Small vessels in the deep dermis show mild cuffing with eosinophils and lymphocytes in mice given TSLP-AAV. No arteritis or necrosis is present.

Table S1. Description of organ architecture and inflammation in mice given Ctrl- versus TSLP-AAV. The histological findings presented in Fig. S3 are described for each organ including the lung, liver, kidney, small intestine, colon, and skin.

Target	Clone	Fluorochrome	Company	Catalogue #	Concentration
Mouse/human B220	RA3-6B2	PE-Cy7	BioLegend	103222	1 μ g/ml
Mouse CD3	17A2	PerCP-Cy5.5	BioLegend	100218	1 μ g/ml
Mouse CD4	GK1.5	FITC	BioLegend	100406	2.5 μ g/ml
Mouse CD4	RM4-5	FITC	BioLegend	100510	2.5 μ g/ml
Mouse CD4	RM4-5	PerCP-Cy5.5	eBioscience	45-0042-82	1 μ g/ml
Mouse CD8 α	53-6.7	APC	BioLegend	100712	1 μ g/ml
Mouse CD8 α	53-6.7	BV421	BioLegend	100753	1 μ g/ml
Mouse/human CD11b	M1/70	PE-Cy7	BioLegend	101215	1 μ g/ml
Mouse CD11c	N418	PE-Cy7	BioLegend	117318	1 μ g/ml
Mouse CD16/CD32	2.4G2	unconjugated	BD Biosciences	553142	2.5 μ g/ml
Mouse CD19	6D5	PE-Cy7	BioLegend	115520	1 μ g/ml
Mouse/human CD44	IM7	FITC	BioLegend	103006	2.5 μ g/ml
Mouse CD45	30-F11	BV605	BioLegend	103155	1 μ g/ml
Mouse CD45	30-F11	BV711	BioLegend	103147	1 μ g/ml
Mouse CD45.1	A20	BV711	BioLegend	110739	1 μ g/ml
Mouse CD45.2	104	AF700	eBioscience	56-0454-82	1 μ g/ml
Mouse CD62L	MEL-14	AF700	BioLegend	104426	2.5 μ g/ml
Mouse CD62L	MEL-14	APC	BioLegend	104412	1 μ g/ml
Mouse CD69	H1.2F3	PerCP-Cy5.5	BioLegend	104522	1 μ g/ml
Mouse CD69	H1.2F3	PE-Cy7	BioLegend	104512	1 μ g/ml
Mouse CD90.2	53-2.1	PerCP-Cy5.5	BioLegend	140322	1 μ g/ml
Mouse CD103	2E7	BV605	BioLegend	121433	1 μ g/ml
Mouse CD103	2E7	PE	eBioscience	12-1031-82	1 μ g/ml
Mouse/human KLRG1	2F1/KLRG1	BV421	BioLegend	138414	1 μ g/ml
Mouse NK1.1	PK136	PE-Cy7	BioLegend	108714	1 μ g/ml
Mouse TCR β	H57-597	BV605	BioLegend	109241	1 μ g/ml
Mouse TCR β	H57-597	BV711	BioLegend	109243	1 μ g/ml
Mouse TCR β	H57-597	PE-Cy7	BioLegend	109222	1 μ g/ml

Table S2. Flow cytometry antibodies. List of fluorophore-conjugated antibodies used for surface staining for flow cytometry and cell sorting.

Target	Host	Clone	Conj	Company	Catalogue #	Concentration or dilution
Mouse/rat/human CD3	Rabbit	CAL57	unconj	Abcam	ab237721	5.1 μ g/ml
Mouse CD4	Rabbit	EPR195	unconj	Abcam	ab183685	1.8 μ g/ml
Mouse CD8	Rabbit	D4W2Z	unconj	Cell Signaling Technology	98941	1:200
Mouse/rat/human Ki67	Rabbit	SP6	unconj	Abcam	ab16667	5.1 μ g/ml
Mouse/human Krt5	Chicken	Poly9059	unconj	BioLegend	905903	2.5 μ g/ml
Human Krt79	Rabbit	Polycl	unconj	ThermoFisher	PA5-46517	1 μ g/ml
Chicken IgY	Goat	Polycl	Alexa 488	ThermoFisher	A-11039	2.2 μ g/ml
Rabbit IgG	Goat	Polycl	Alexa 555	ThermoFisher	A-21428	2 μ g/ml

Table S3. Immunohistochemistry antibodies. List of antibodies used for immunohistochemical staining of tissue samples. Polycl: polyclonal. Conj: conjugation. Unconj: unconjugated.