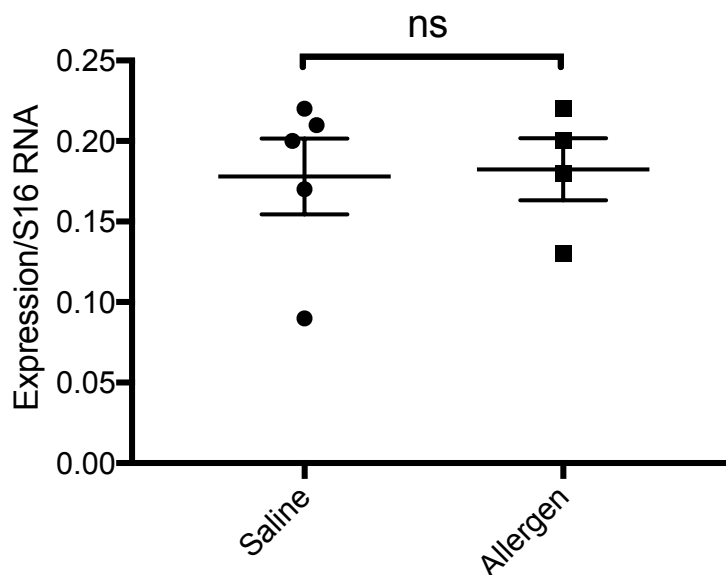


Supplementary Figure. (A) *Arhgef12* expression in murine airway, with and without allergen sensitization, measured by qPCR of laser-dissected airway smooth muscle (each point represents a separate mouse). (B) Expression of ARHGEF12 by qPCR (left) and by Western blot (right; quantified by densitometry), with and without overnight IL17A treatment (100 ng/mL; n=3 biological replicates). Data represent the mean $\pm$ SEM.

A



B

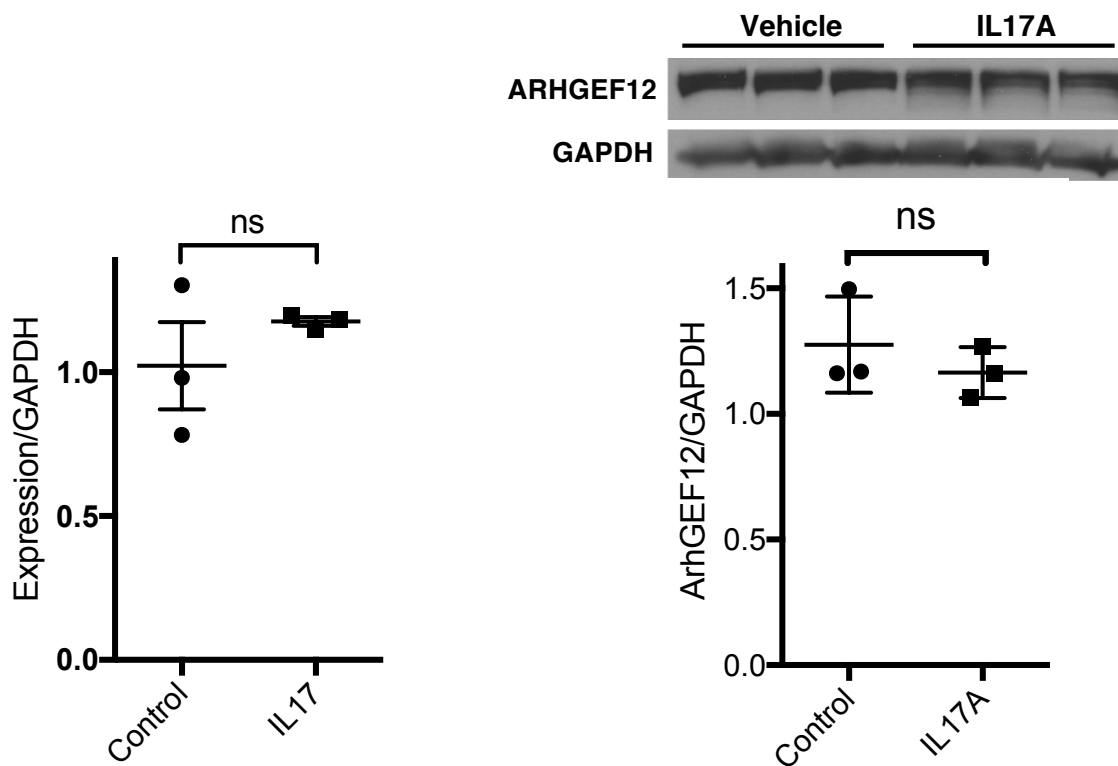


Table 1. Patients with a clinical diagnosis of asthma. B/D indicates the percent change in FEV1 with administration of bronchodilator.

Age	Gender	BMI	Relevant Medications	Lung Function
65	F	22	Ipratropium, prednisone	FEV1% 70; FEV1/FVC 0.66; B/D >15%
54	M	38	Protonix	FEV1% 58; FEV1/FVC 0.64; B/D >15%
73	F	31	Albuterol	FEV1% 64; B/D >15%
75	M		Albuterol, ipratropium	FEV1% 48
56	F	24	Albuterol, Pulmicort	FEV1% 70; FEV1/FVC 0.68; B/D >15%
68	F	39	Advair	FEV1% 71; FEV1/FVC 0.61
59	M	24	Albuterol, Montelukast	FEV1% 61; FEV1/FVC 0.58

Table 2: Primer sequences used for qRT-PCR.

Gene	Forward (5'-3')	Reverse (5'-3')
<i>Arhgef12</i>	ACACAGTCTACTATCACGGACA	AAATCATGCGATGAACTGCGT
<i>Arhgef11</i>	AGTTAGTGGAGATCGCATTGTG	CCG-TTTACTTTGATGATCCGGT
<i>Vav2</i>	GACTGAGGACGACAAGAGAAGC	CGCAAGGGACCCATGTAGT
<i>Arhgef3</i>	CACAGCGGAAACGAAAACAGA	GGGGTTTGACCCTTTTGTACTA
<i>Arhgef18</i>	AGCACCAGTAGCCAAGTGGA	CCACCCTTGCTAGGGCTTC
<i>Arhgef10</i>	AACATGAAGCGAAATGTGACACC	CTCTCGTCCTATCGTCGGC
<i>Arhgef1</i>	CTGGAGAAGAC-GCGGTTCTA	CTTGAGCGGAAGTCCTCTA
<i>Arhgef2</i>	ATCTCCGTCTCCGGCATGA	CAGGGTGTCTTTACAGCGGTT
<i>Arhgef17</i>	CCTCCTCGAACGTGCTTTCC	TGCCAAGAATGTAAACCATCCG
<i>Kalrn</i>	CCGACTCTTGGACTACCTTATGA	CGACCCTACAGTTGTGCAG
<i>Ect2</i>	GGCCTTAAAGGAAATGAAAGTGC	ACCAGGTTACGCATACTCGTA
<i>Arhgef19</i>	GTCGCCCAGTAGCTGTGTG	CCTCTGGAGCAATGGGAAAGA
<i>Arhgef10l</i>	CTCACGTCGAATTGACCGCTT	CGATGCACATCCTCGTAAACG
<i>Arhgef4</i>	TCTGCAAGTATCCCCCTCCAG	TCGTTTCCGTTTCGTTGATGAG
<i>Arhgef8</i>	CGGCGAACGAGAGATGCTC	CTCCTTCAAATCAAGGCTGCTA
<i>acta2</i>	GTCCCAGACATCAGGGAGTAA	TCGGATACTTCAGCGTCAGGA
<i>Epcam</i>	GCGGCTCAGAGAGACTGTG	CCAAGCATTTAGACGCCAGTTT
<i>Pecam</i>	ACGCTGGTGCTCTATGCAAG	TCAGTTGCTGCCCATTCATCA
<i>Ptprc</i>	GTTTTCGCTACATGACTGCACA	AGGTTGTCCAAGTACATCTTTC
<i>Gapdh</i>	AGGTCGGTGTGAACGGATTTG	GGGGTCGTTGATGGCAACA
<i>16S</i>	TGCAGGTCTTCGGACGCAAGAAAA	CGAATATCCACACCAGCAAATCGC
<i>ARHGEF12</i>	ACACAGTCTACTATCACCGACA	TGCAATGCGCTCAACTTTCTG
<i>GAPDH</i>	ACAACTTTGGTATCGTGGAAGG	GCCATCACGCCACAGTTTC