increases human peripheral blood-derived mast cell generation of PGD_2 in vitro at 6 hours compared to IL-33 alone. A, B, Data are displayed for individual experiments with cells from three different donors; differences are not statistically significant.

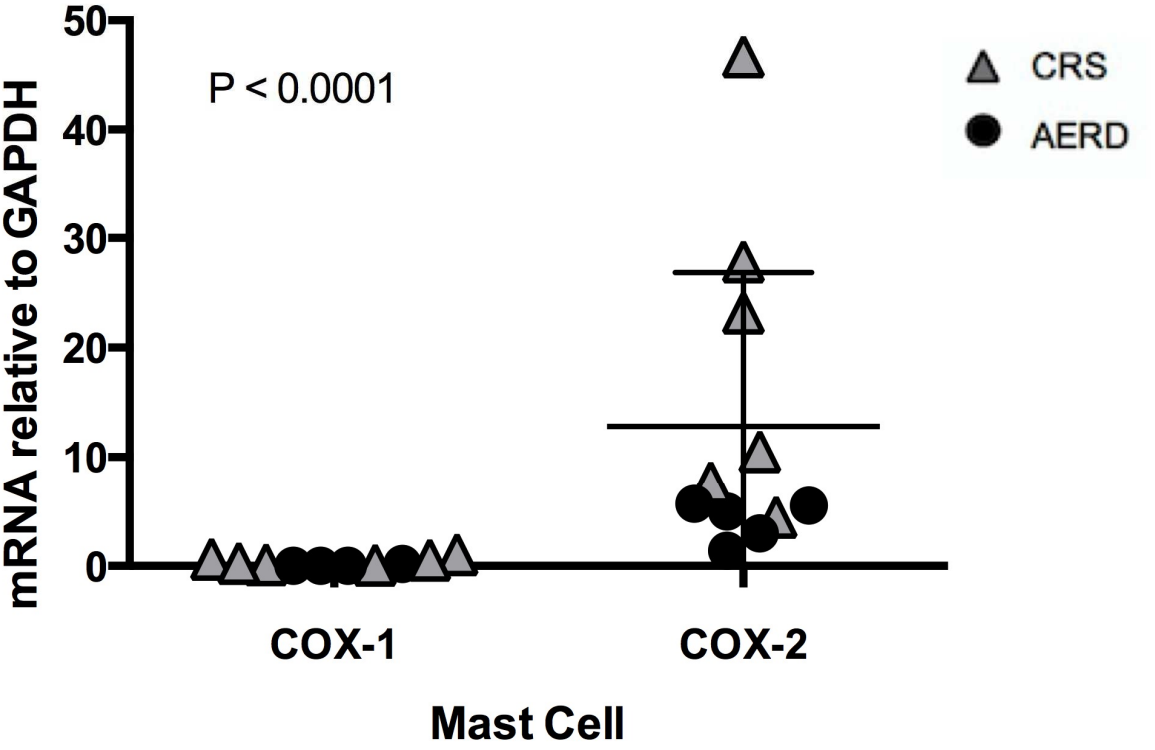
FIG E1. COX-1 and COX-2 mRNA expression in mast cells and eosinophils. **A, B,** COX-1 and COX-2 mRNA expression in sorted nasal polyp mast cells (**A**) and eosinophils (**B**) in subjects with AERD and CRS. A, B, Data are shown as individual points with group median as measured by Mann-Whitney test.

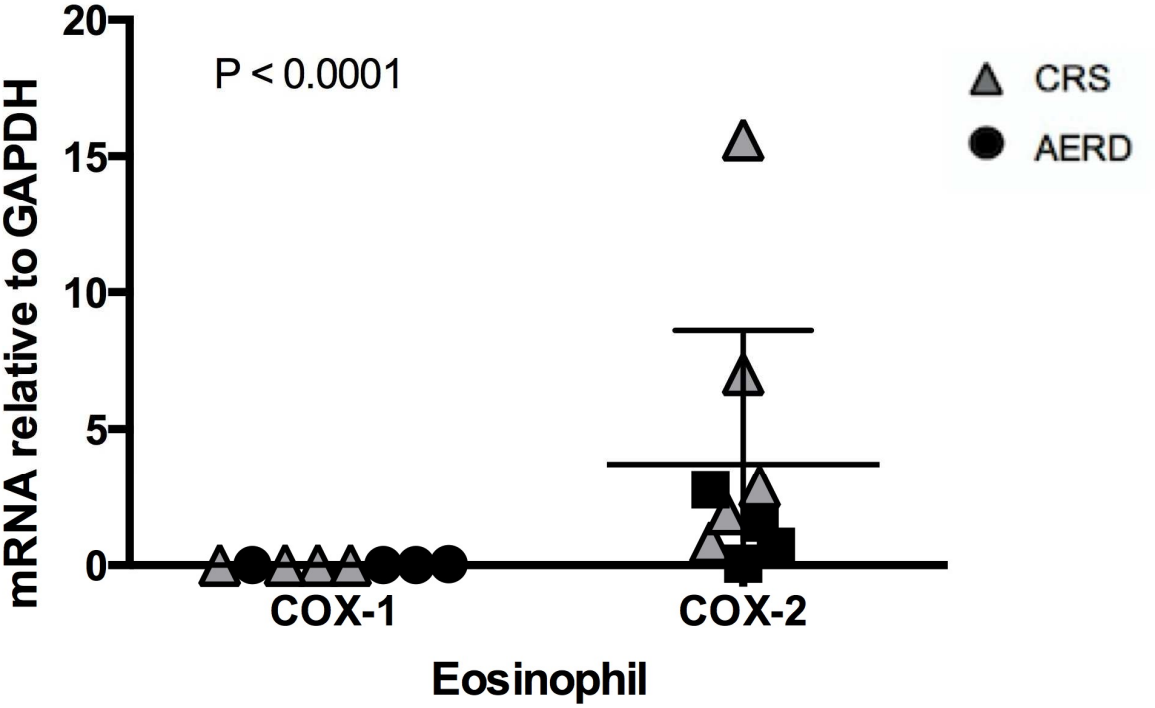
FIG E2. Confirmation of TSLP protein in nasal polyp samples measured by Western blotting. Top panel, 10 kDa TSLP protein measured in nasal polyp lysate and 15 kDa TSLP protein measured from recombinant TSLP (Novus antibody). Middle panel: Same Western blot post blocking with immunogenic peptide (Novus) plus Novus antibody. Bottom panel: Same Western blot using Millipore antibody to identify TSLP.

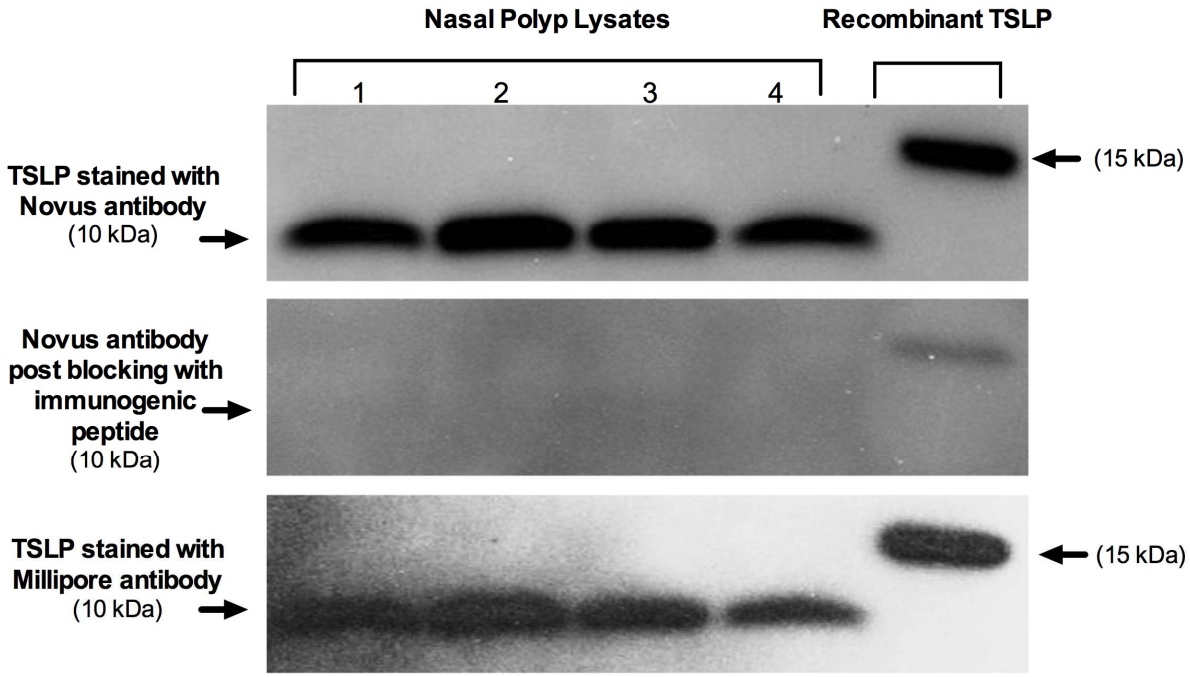
FIG E3. Multiple TSLP protein bands (15 kDa and 10 kDa) expressed in nasal polyp lysates from patients with AERD and CRS.

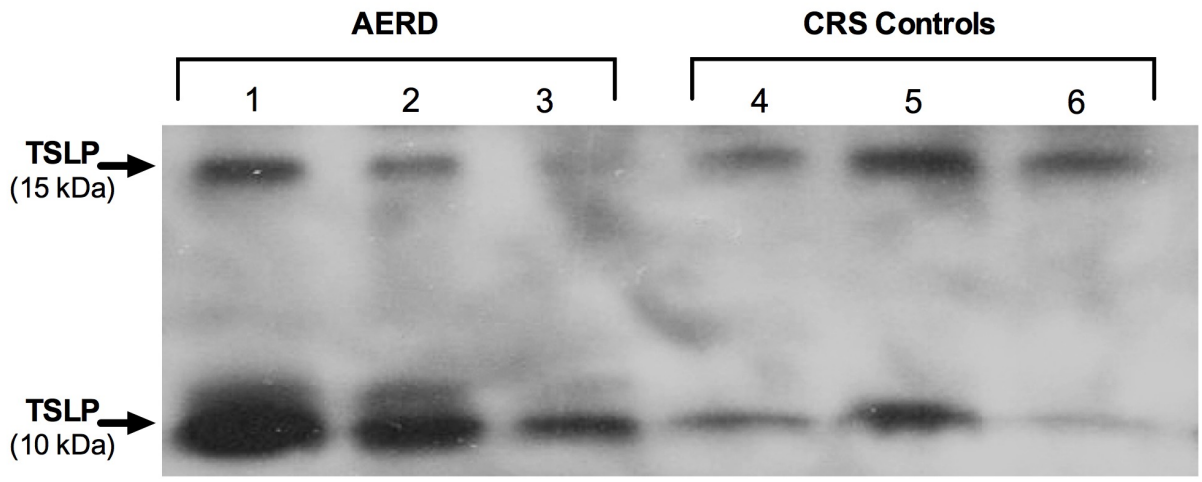
FIG E4. TSLP mRNA expression in sorted nasal polyp structural cells. **A, B**, Cytofluorographic detections of epithelial cells and fibroblasts (**A**) and endothelial cells (**B**). **C**, TSLP mRNA expression from sorted nasal polyp epithelial cells, endothelial cells, and fibroblasts.

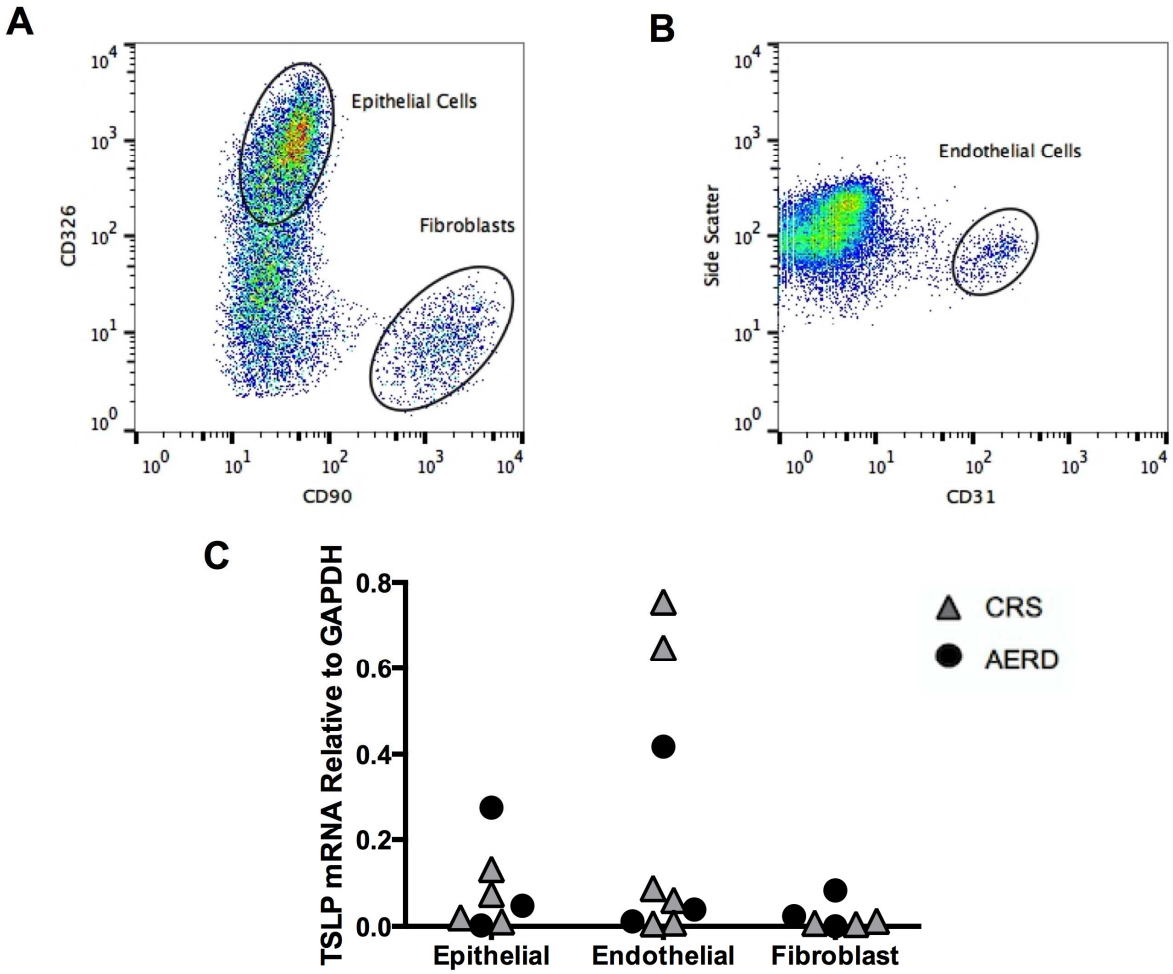
FIG E5. Evaluation of arachidonic acid pathway products following in vitro stimulation of human cord blood-derived mast cells with TSLP **A,** TSLP (10 ng/mL) increases mast cell generation of TXB_2 in vitro at 6 hours. **B,** TSLP (10 ng/mL) stimulation does not increase mast cell generation of cysLTs at 6 hours. A, B, Data are displayed for individual experiments with cells from three different donors.

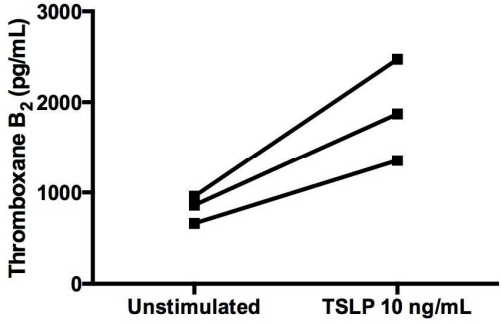

50
40
30
20
10
0
mRNA relative to GAPDH
P < 0.0001
CRS
AERD
COX-1
COX-2
Mast Cell

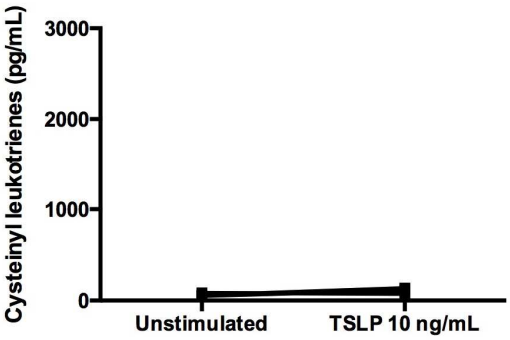

20
15
10
5
0
mRNA relative to GAPDH
P < 0.0001
CRS
AERD
COX-1
COX-2
Eosinophil


Nasal Polyp Lysates
Recombinant TSLP
1
2
3
4
TSLP stained with Novus antibody (10 kDa)
(15 kDa)
Novus antibody post blocking with immunogenic peptide (10 kDa)
TSLP stained with Millipore antibody (10 kDa)
(15 kDa)


AERD
CRS Controls
1
2
3
4
5
6
TSLP
(15 kDa)
TSLP
(10 kDa)


A
Epithelial Cells
Fibroblasts
CD326
CD90
B
Endothelial Cells
Side Scatter
CD31
C
TSLP mRNA Relative to GAPDH
0.8
0.6
0.4
0.2
0.0
Epithelial
Endothelial
Fibroblast
CRS
AERD


Thromboxane B_2 (pg/mL)
3000
2000
1000
0
Unstimulated
TSLP 10 ng/mL


Cysteinyl leukotrienes (pg/mL)
3000
2000
1000
0
Unstimulated
TSLP 10 ng/mL