

Supplemental Figure for:

**Title: TOFACITINIB ALTERS STAT3 SIGNALING AND LEADS TO ENDOMETRIOSIS LESION REGRESSION**

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**Control patient eutopic endometrial cells:**

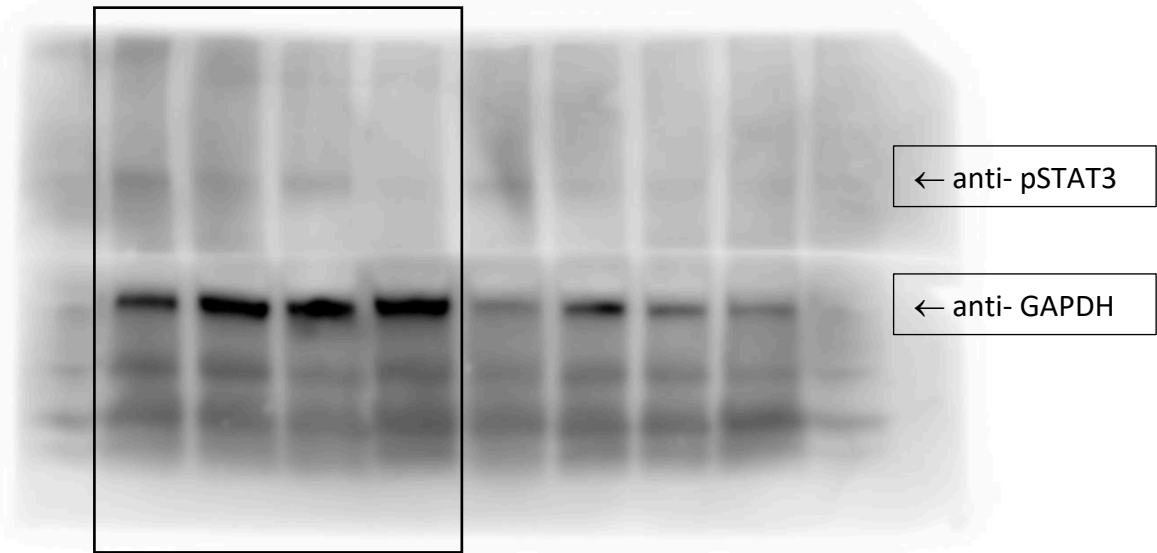
- i. Epithelial:**
  - a. 15 MIN exposure for anti-pSTAT3 and anti-GAPDH**
  - b. 3 MIN exposure for anti-pSTAT3 and anti-GAPDH**
  - c. 1 MIN exposure for anti-STAT3 and anti-GAPDH**
- ii. Stromal:**
  - a. 15 MIN exposure for anti-pSTAT3 and anti-GAPDH**
  - b. 3 MIN exposure for anti-pSTAT3 and anti-GAPDH**
  - c. 1 MIN exposure for anti-STAT3 and anti-GAPDH**

**Endometriosis patient eutopic endometrial cells:**

- i. Epithelial:**
  - a. 15 MIN exposure for anti-pSTAT3 and anti-GAPDH**
  - b. 3 MIN exposure for anti-pSTAT3 and anti-GAPDH**
  - d. 1 MIN exposure for anti-STAT3 and anti-GAPDH**
- ii. Stromal:**
  - a. 15 MIN exposure for anti-pSTAT3 and anti-GAPDH**
  - b. 3 MIN exposure for anti-pSTAT3 and anti-GAPDH**
  - c. 1 MIN exposure for anti-STAT3 and anti-GAPDH**

Supplemental Figure S1: Uncropped western blot gels for Figure 2: Tofacitinib reduced phosphorylation of STAT3 in murine endometriotic lesions and uteri.

a. 15 MIN exposure for anti-pSTAT3 and anti-GAPDH



b. 1 MIN exposure for anti-STAT3

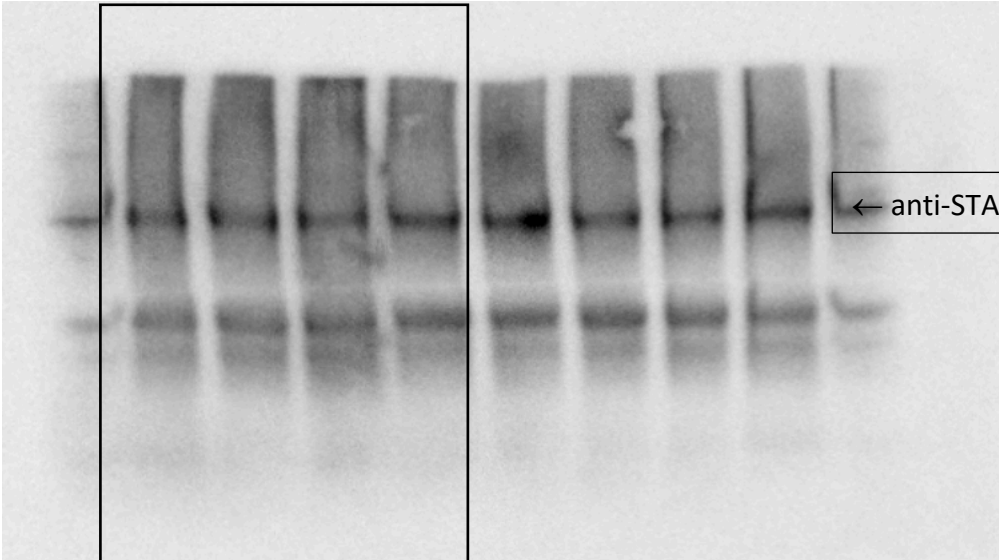
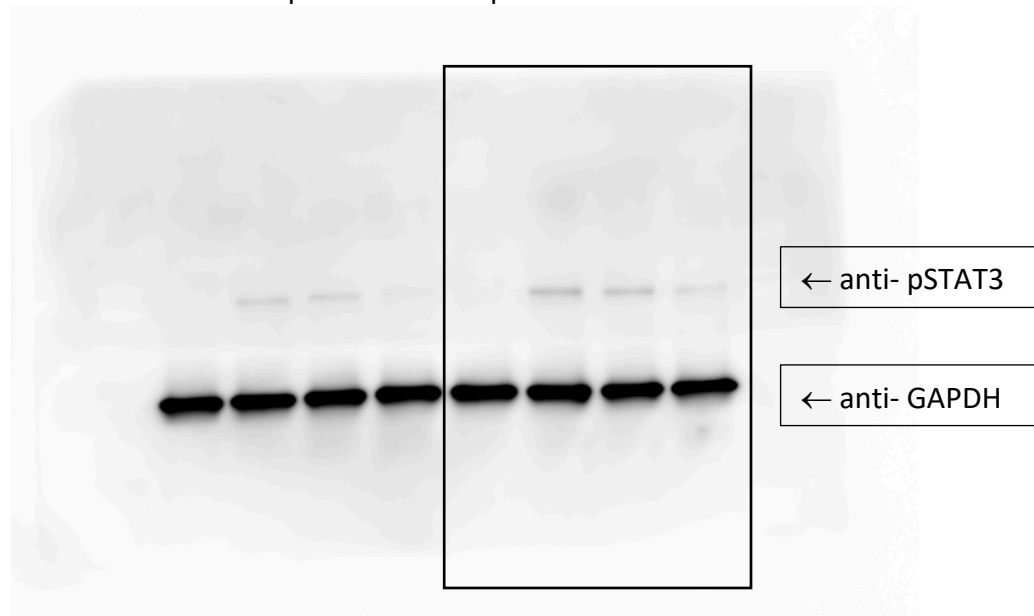


Figure S1 Legend: Panel 1: Unedited representative western blot for mouse uteri and endometriotic lesions for phosphorylated STAT3 (pSTAT3) levels, GAPDH, and total-STAT3 following treatment with vehicle or Tofacitinib via oral gavage for four weeks.

Supplemental Figure S2: Uncropped western blot gels for Figure 3: Tofacitinib reduced IL-6+E2 stimulated phosphorylation of STAT3 in Ishikawa cells. (Samples performed in replicate)

a. 15 MIN exposure for anti-pSTAT3 and anti-GAPDH



b. 1 MIN exposure for anti-STAT3 and anti-GAPDH

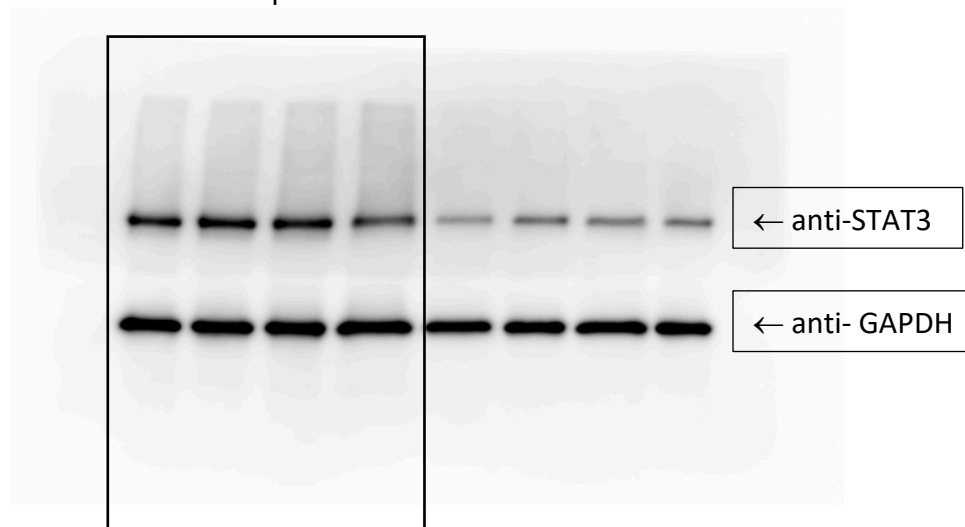
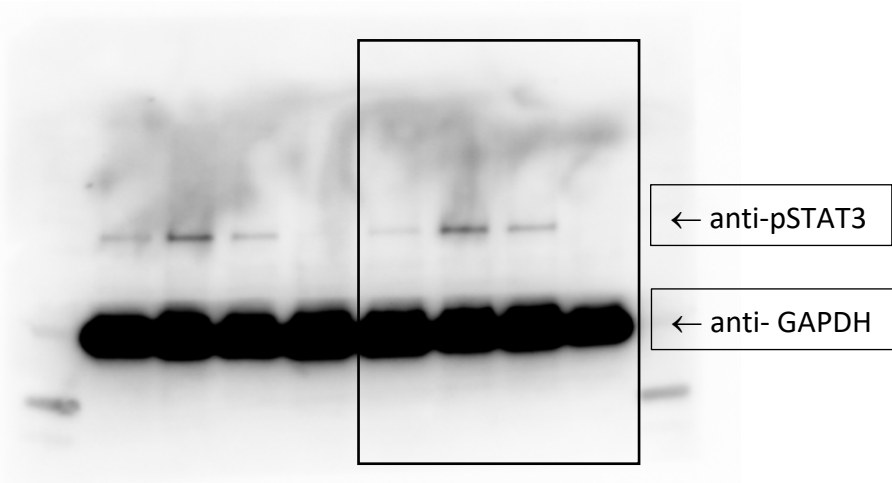


Figure S2 Legend: Unedited representative western blot for phosphorylated STAT3 (pSTAT3) levels, GAPDH, and total-STAT3 for Ishikawa cells following 24 hr treatment.

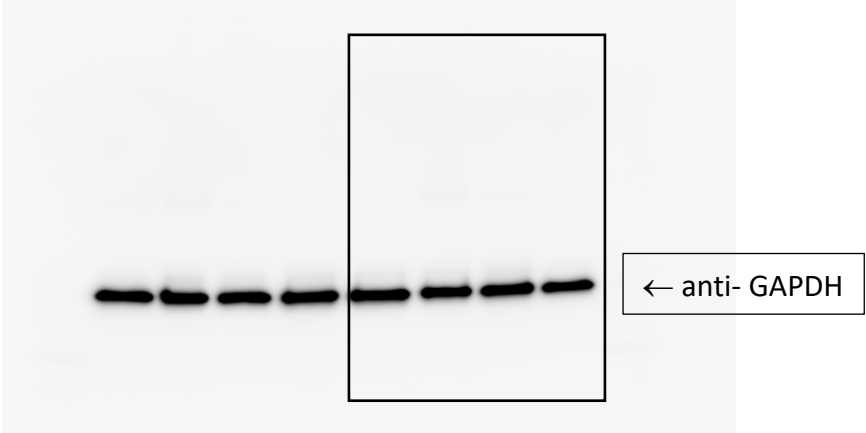
Supplemental Figure S3: Uncropped western blot gels for Figure 5: Tofacitinib treatment decreased pSTAT3 levels in primary cells. (Samples performed in replicate)

Control patient eutopic epithelial Cells:

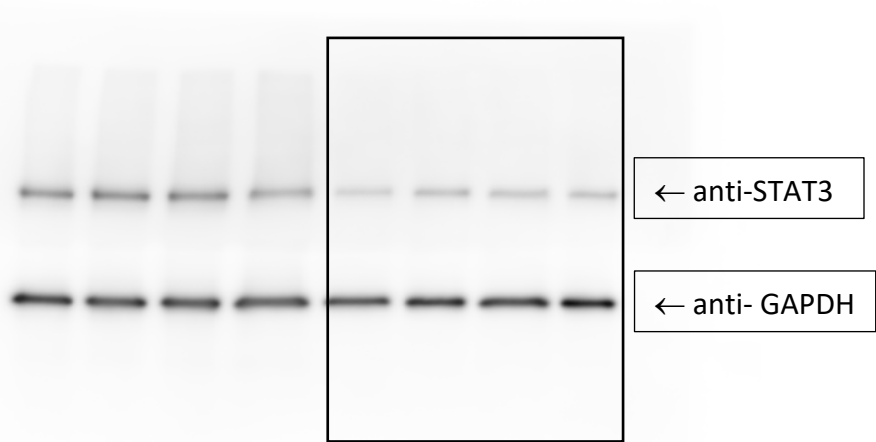
- i. Epithelial Cells
  - a. 15 MIN exposure for anti-pSTAT3 and anti-GAPDH



- b. 3 MIN exposure for anti-pSTAT3 and anti-GAPDH

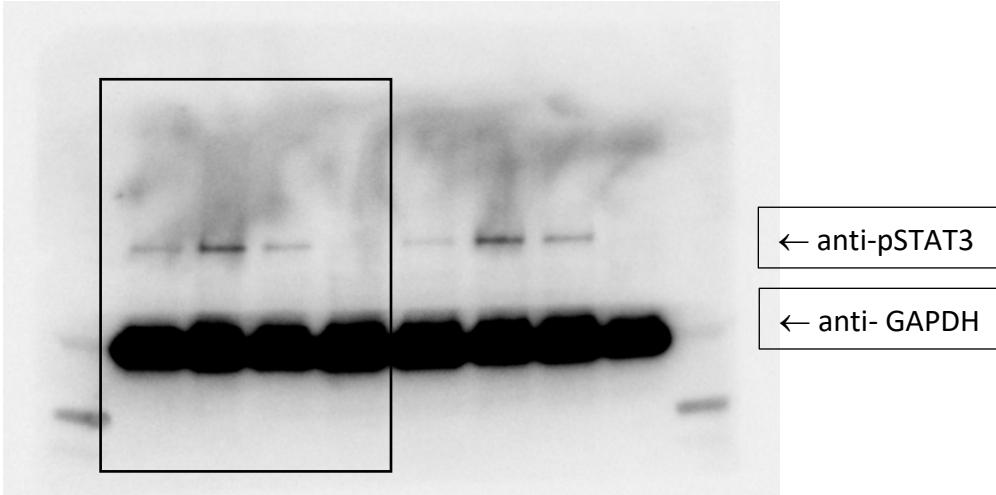


- c. 1 MIN exposure for anti-STAT3 and anti-GAPDH

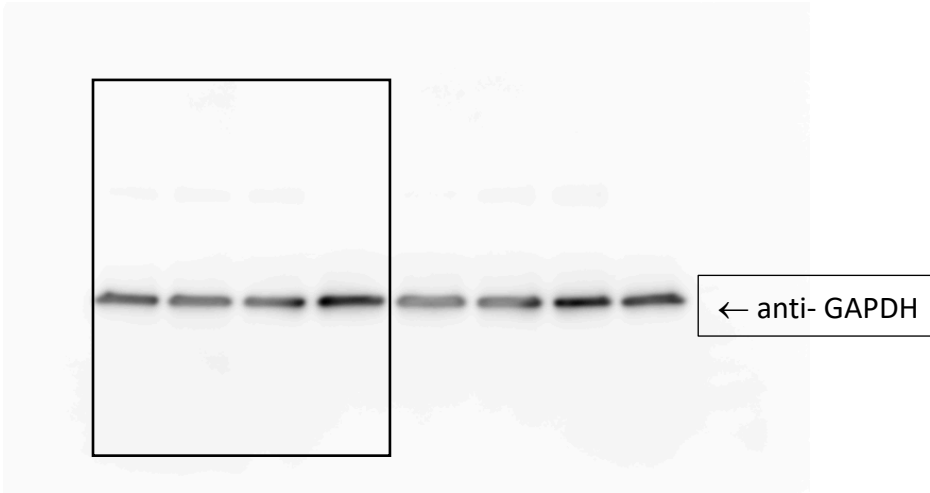


ii. Stromal cells:

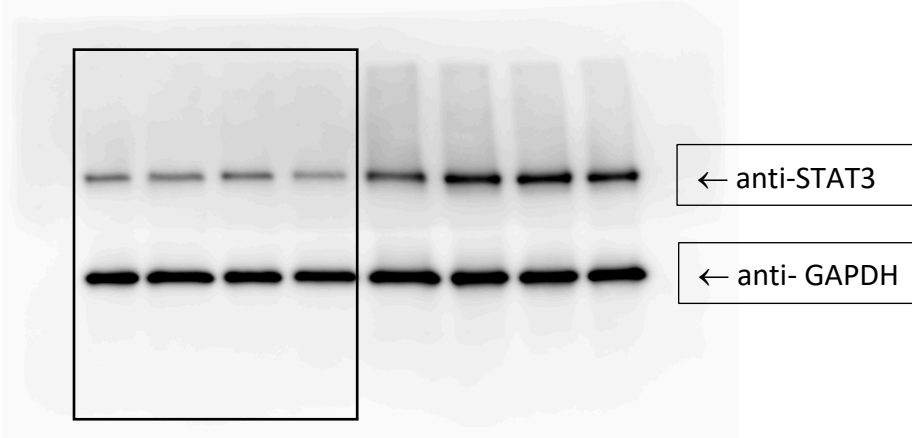
a. 15 MIN exposure for anti-pSTAT3 and anti-GAPDH



b. 3 MIN exposure for anti-pSTAT3 and anti-GAPDH

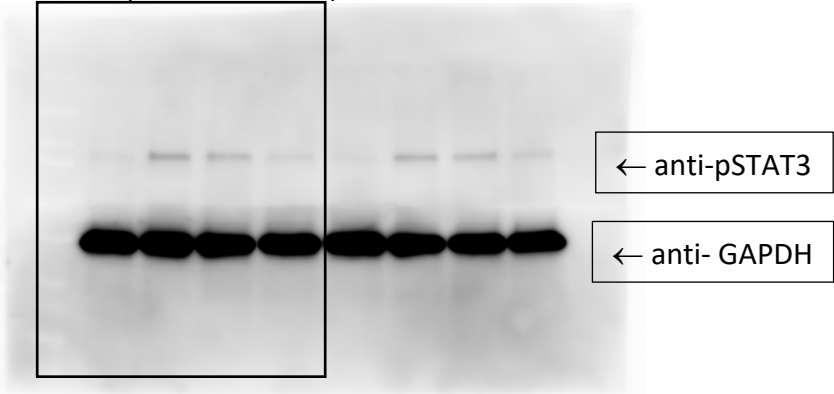


c. 1 MIN exposure for anti-STAT3 and anti-GAPDH

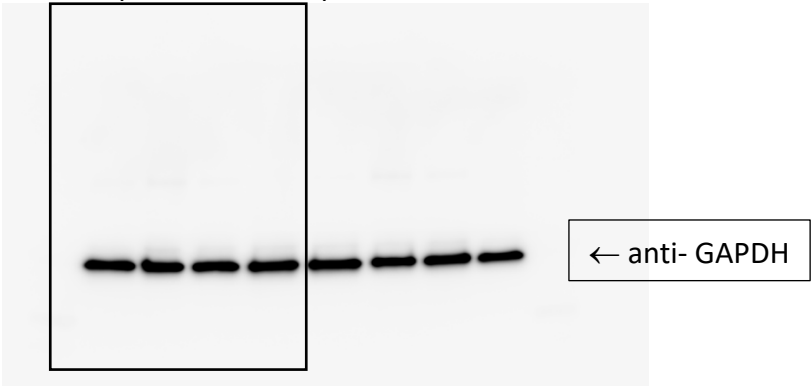


Endometriosis eutopic endometrial Cells:

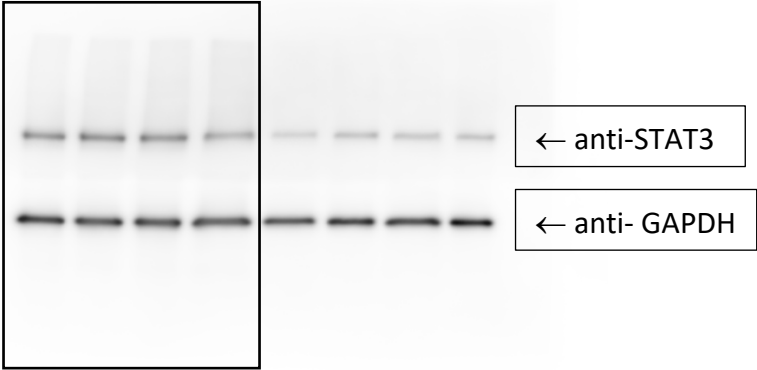
- i. Epithelial cells:
  - a. 15 MIN exposure for anti-pSTAT3 and anti-GAPDH



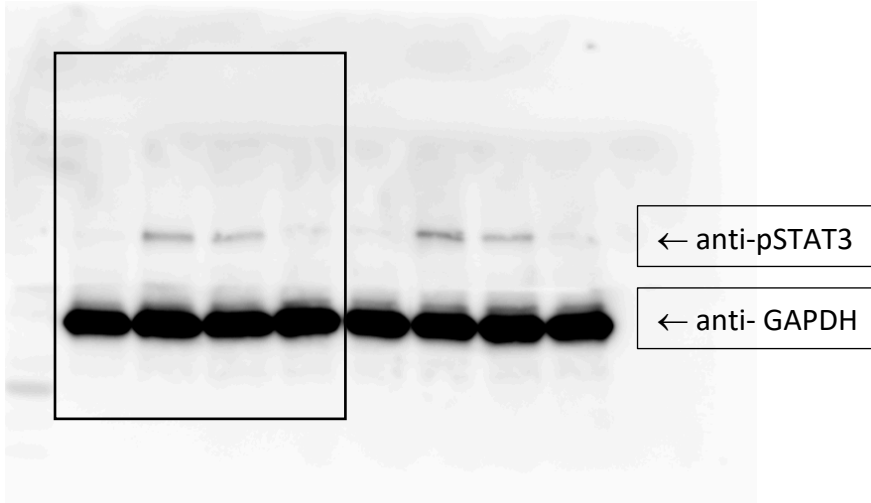
- b. 3 MIN exposure for anti-pSTAT3 and anti-GAPDH



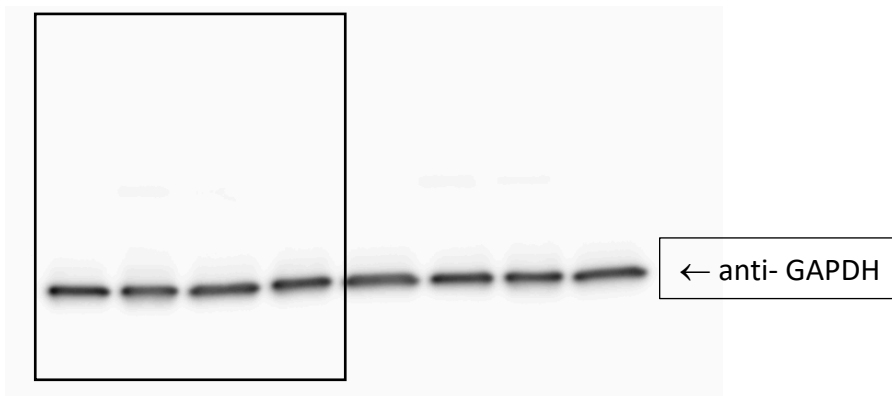
- c. 1 MIN exposure for anti-STAT3 and anti-GAPDH



- ii. Stromal cells
- a. 15 MIN exposure for anti-pSTAT3 and anti-GAPDH



- b. 3 MIN exposure for anti-pSTAT3 and anti-GAPDH



- c. 1 MIN exposure for anti-STAT3 and anti-GAPDH

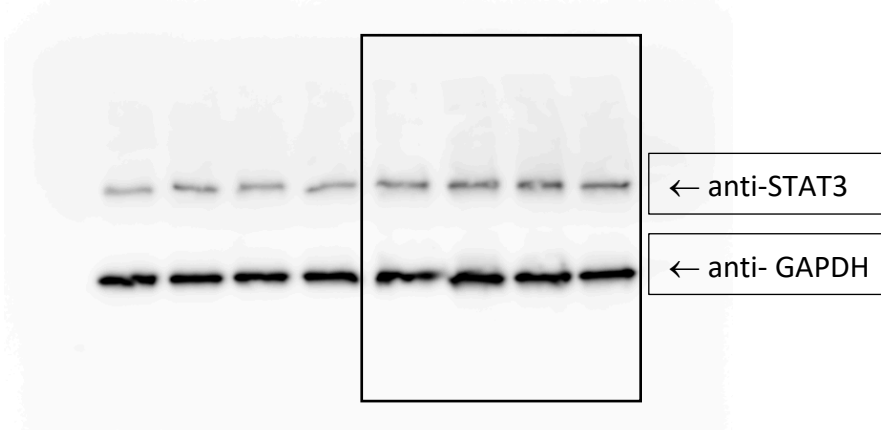


Figure S3 Legend: Unedited representative western blots for phosphorylated STAT3 (pSTAT3) levels, GAPDH, and total-STAT3 for eutopic epithelial (i) and stromal (ii) endometrial cells in control and endometriosis patients following 24 hr treatment.