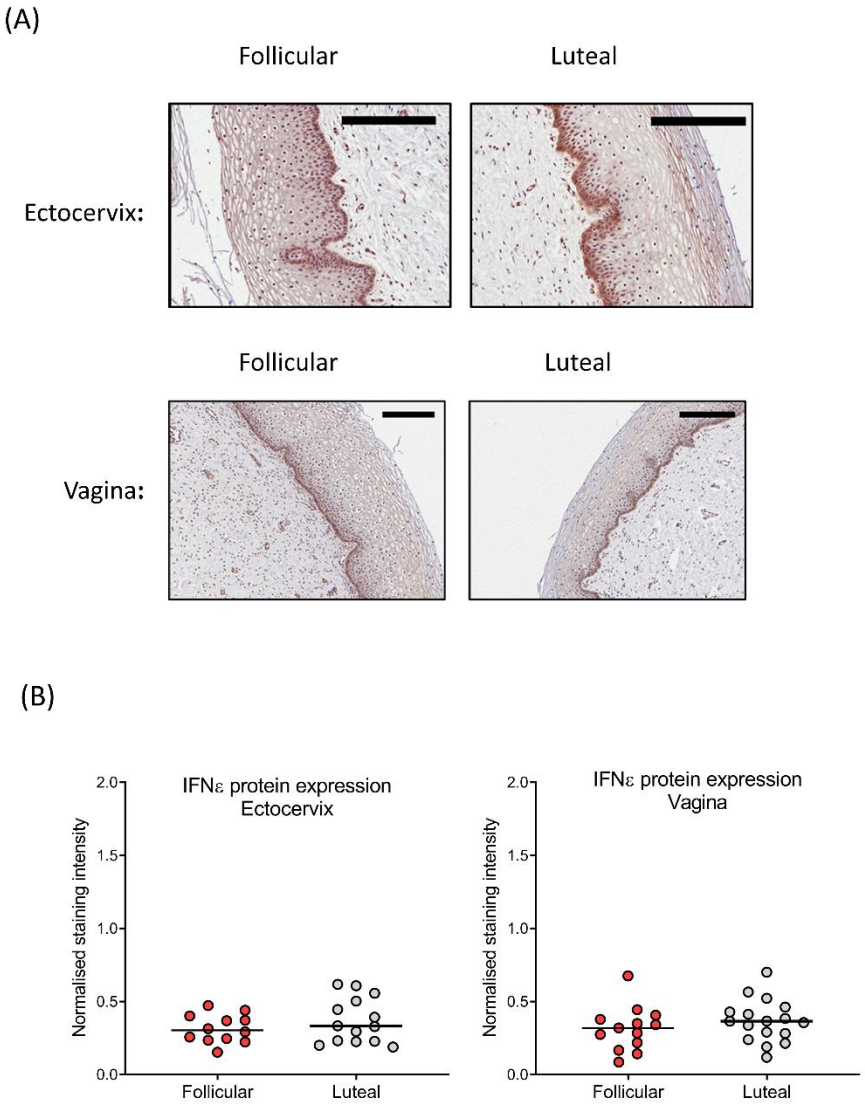


**Figure S1.** (A) Representative IHC images of IFNε (brown) in vaginal and ectocervical sections in the follicular and luteal phase of menstrual cycle. Bar, 200 μM. (B) Quantification of ectocervical and vaginal epithelial IFNε staining intensity in women in follicular or luteal stage of menstrual cycle.

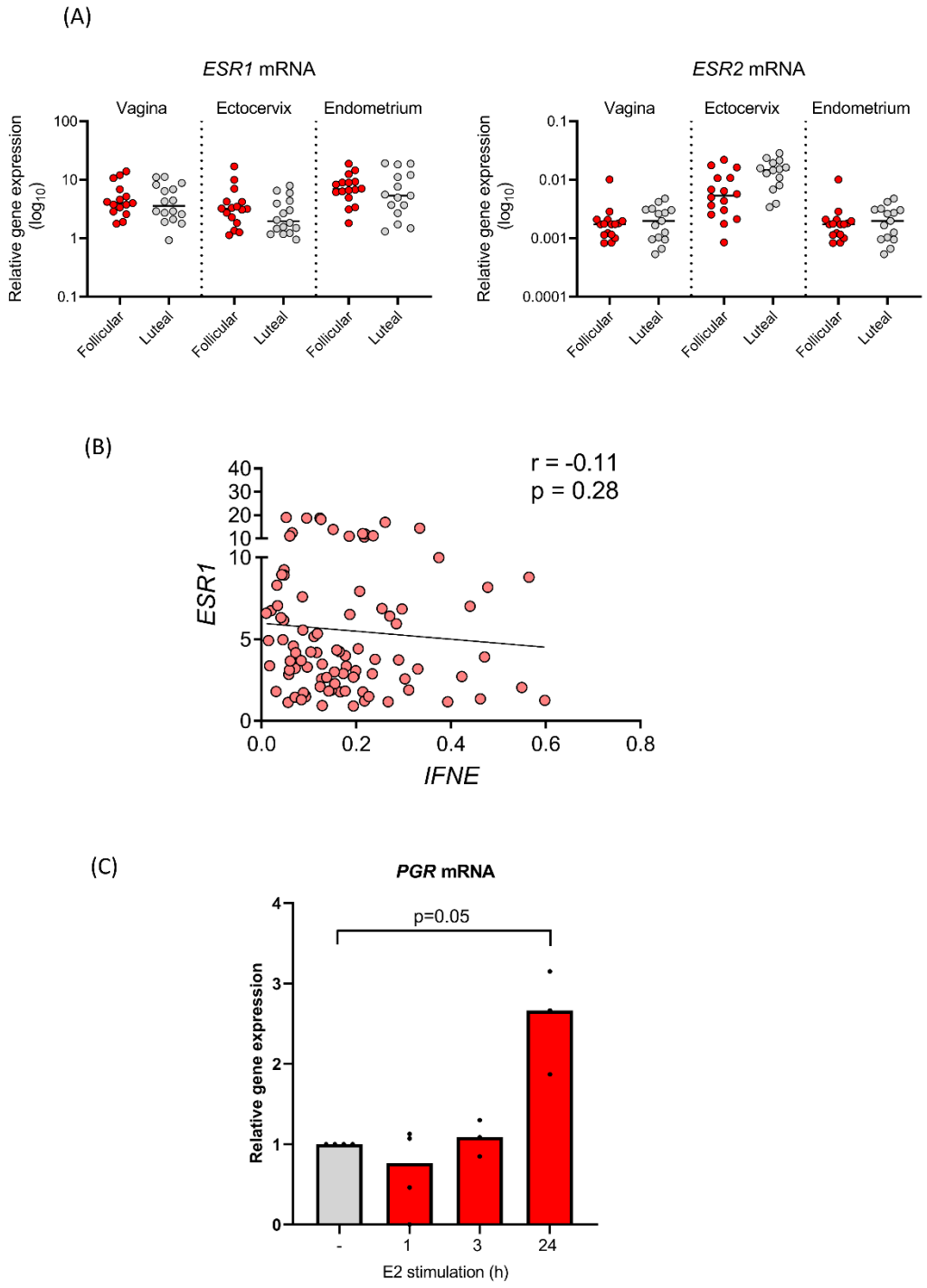


**Figure S2.** (A) Expression of *ESR1* and *ESR2* in vaginal, ectocervical and endometrial biopsies as determined using qPCR. Expression stratified by stage of menstrual cycle and median expression is shown. Data analysed using Kruskal-Wallis testing with Dunn's multiple comparison analysis. (B) Spearman correlation analysis of *ESR1* and *IFNE* expression in the FRT. (C) PGR mRNA expression in primary uterine epithelial cells from n=3 donors stimulated with 10nM estrogen for up to 24h. Data analysed using Kruskal-Wallis testing with Dunn's multiple comparison analysis.

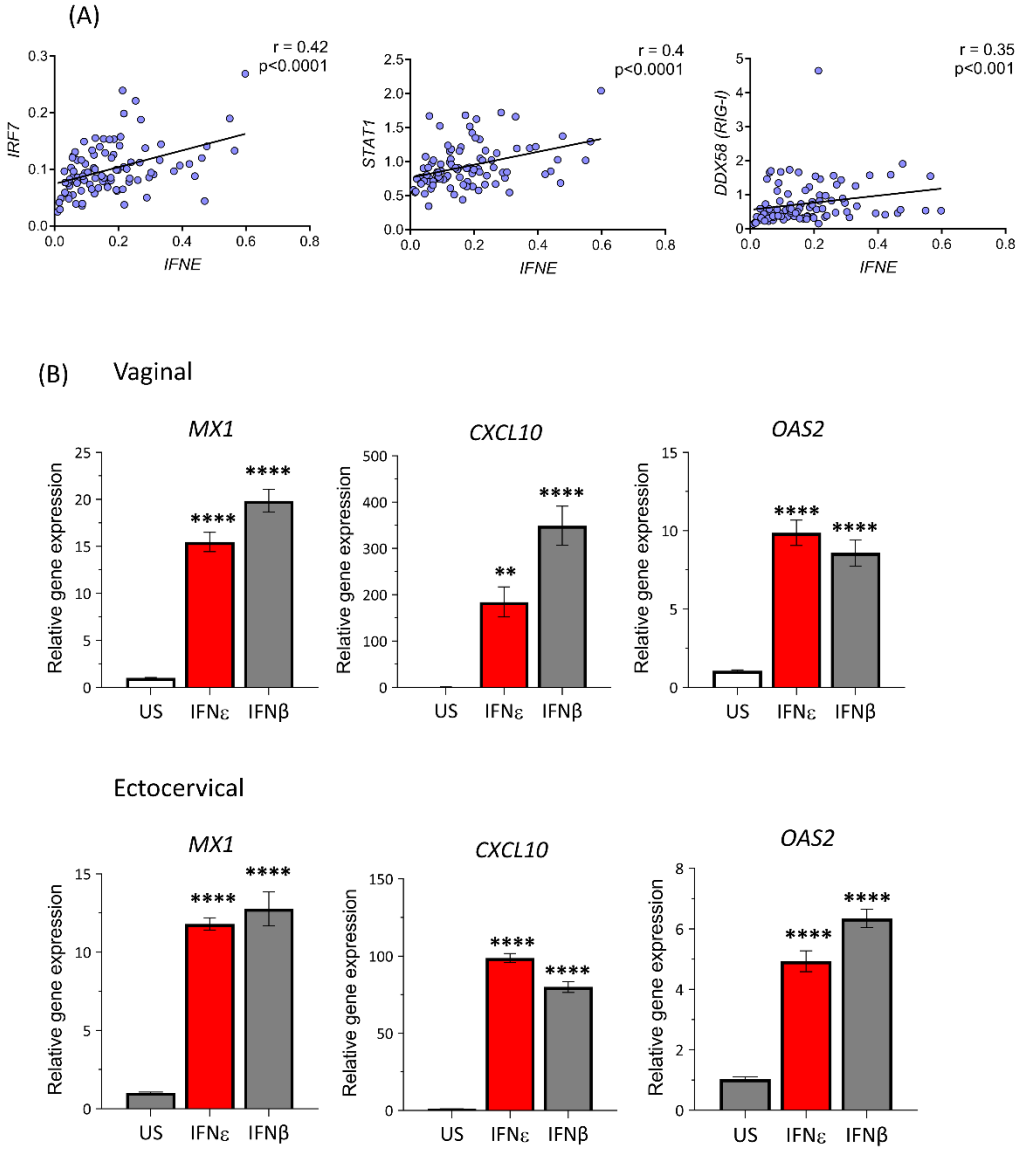


**Figure S3.** (A) Spearman correlation analysis of the expression of *IFNE* with the IRGs, *IRF7*, *STAT1* and *DDX58* across FRT samples. **(**B) Vaginal (VK2) and ectocervical (Ect1) cells were stimulated for 3hrs with 100 IU/ml of recombinant IFNε or IFNβ and expression of the IRGs *MX1*, *CXCL10* and *OAS2* were quantified by qPCR. Expression relative to unstimulated control (US). Data from n=3 independent biological replicates, shown as mean ±SEM and analysed using one-way ANOVA with Dunnett's multiple comparisons testing **p<0.01, ****p<0.0001.

Supplemental Table 1: Taqman probe IDs

| Gene name | Taqman ID |
|---|---|
| *IFNA1* | Hs00855471_g1 |
| *IFNA2* | Hs00265051_s1 |
| *IFNA4* | Hs01681284_sH |
| *IFNB* | Hs01077958_s1 |
| *IFNL1* | Hs00601677_g1 |
| *IFNL2* | Hs00820125_g1 |
| *IFNL3* | Hs04193047_gH |
| *IFNE* | Hs00703565_s1 |
| *IFNY* | Hs00989291_m1 |
| *ESR1* | Hs00174860_m1 |
| *PGR* | Hs01556702_m1 |
| *ESR2* | Hs00230957_m1 |
| *18S* | Hs99999901_s1 |
| *RPLPO* | Hs00420895_gH |
| *HMBS* | Hs00609296_g1 |
| *MX1* | Hs00895608_m1 |
| *OAS2* | Hs00942643_m1 |
| *CXCL10* | Hs01124251_g1 |
| *DDX58* | Hs00204833_m1 |
| *IRF7* | Hs01014809_g1 |

Supplemental Table 2: Primers for SyBr green qPCR

| | F | R |
|---|---|---|
| *18S* | GTAACCCGTTGAACCCCATT | CCATCCAATCGGTAGTAGCG |
| *MX1* | GGTGGTGGTCCCCAGTAATG | ACCACGTCCACAACCTTGTCT |
| *CXCL10* | TTCCTGCAAGCCATTTTGT | TTCTTGATGGCCTTCGATTC |
| *OAS2* | GAAGCCCTACGAAGAATGTCAGA | TCGGAGTTGCCTCTTAAGACTGT |