

Roles of interleukin-1 receptor antagonist in prostate cancer progression

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Supplementary Figure S1

Quantification of colonies in 3D culture approach.

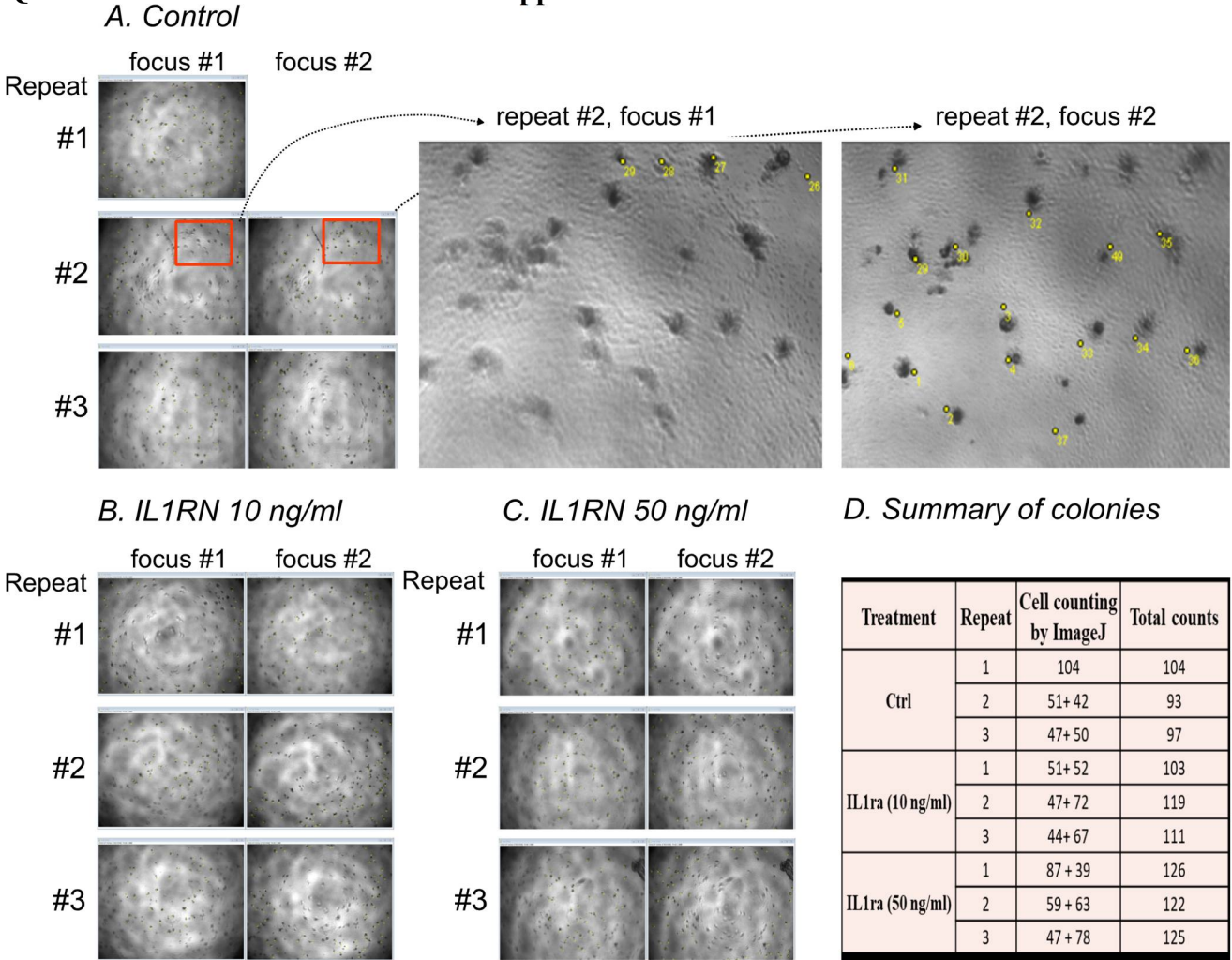


Figure legend

(A-C) TRAMP-C1 cells were seeded on Matrigel-coated wells and treated with different concentration of IL1RN (control, panel A; 10 ng/ml, panel B; 50 ng/ml, panel C). Each condition was performed in triplicate (Repeat #1-#3). The images of technical repeats were taken with different focal planes and two selected images (focus #1, focus #2) were used for quantification. Colonies identified in the two focal planes were not overlapped (as demonstrated with the two red boxes) and then counted using Image J software. (D) The identified colonies in two focal planes were combined to derive the total counts in each repeat.

Supplementary Figure S2

Gene expression patterns in three prostate cancer databases.

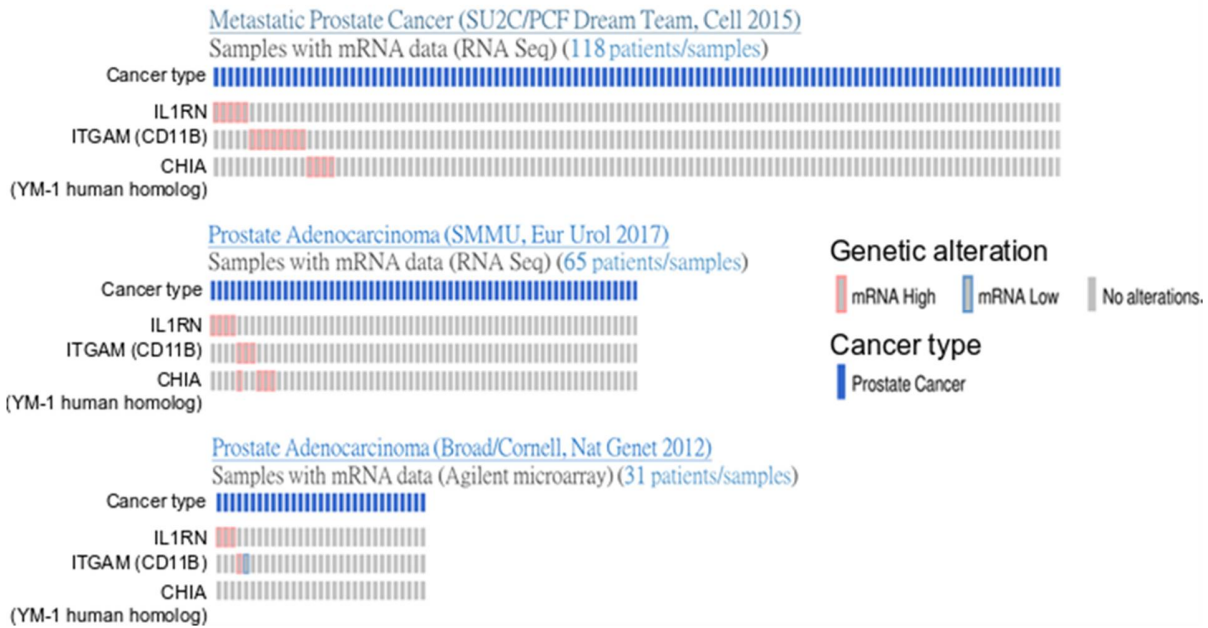


Figure legend

A bar code plot for mRNA expression of IL1RN, ITGAM (CD11b), and CHIA (human homolog gene of mouse YM-1) in three different prostate cancer clinical databases were analyzed using the cBioPortal website.

Supplementary Table S1. Primer sequences for the qRT-PCR.

| Gene | 5'-3' |
|---------|--------------------------------|
| IL1RN F | CAG CTC ATT GCT GGG TAC TT |
| IL1RN R | CTC AGA GCG GAT GAA GGT AAA G |
| CXCL1 F | GTG TCT AGT TGG TAG GGC ATA AT |
| CXCL1 R | CAG TCC TTT GAA CGT CTC TGT |
| CCL2 F | AGT AGG CTG GAG AGC TAC AA |
| CCL2 R | GTA TGT CTG GAC CCA TTC CTT C |
| GAPDH F | TCT CCC TCA CAA TTT CCA TCC |
| GAPDH R | GGG TGC AGC GAA CTT TAT TG |

Supplementary Table S2. Abbreviations used in the article

| Abbreviation | Full name |
|---------------------|---|
| ADT | Androgen-deprivation therapy |
| AR | Androgen receptor |
| BrdU | Bromodeoxyurea |
| CCL2 | C-C motif chemokine ligand 2 |
| CRPC | Castration-resistant prostate cancer |
| CD11b | Cluster of differentiation 11b |
| CHIA | Acidic mammalian chitinase |
| DHT | Dihydrotestosterone |
| ELISA | Enzyme-linked immunosorbent assay |
| IFN γ | Interferon gamma |
| IL1 α | Interleukin-1 alpha |
| IL1 β | Interleukin-1 beta |
| IL1RAP | Interleukin-1 receptor accessory protein |
| IL1RN | Interleukin-1 receptor antagonist |
| IL1R1 | Interleukin-1 receptor type 1 |
| LLC1 | Lewis lung carcinoma |
| LNCaP | Lymph node carcinoma of the prostate |
| MDV | AR inhibitor MDV3100 |
| N-CoR | Nuclear receptor corepressor 1 |
| RT-qPCR | Reverse-transcription quantitative polymerase chain reaction |
| TCGA | The cancer genome atlas |
| TILs | Tumor-infiltrating leukocytes |
| TME | Tumor microenvironment |
| TNF α | Tumor necrosis factor alpha |
| TRAMP-C1 | transgenic adenocarcinoma of the mouse prostate cell line |