Figure S1.

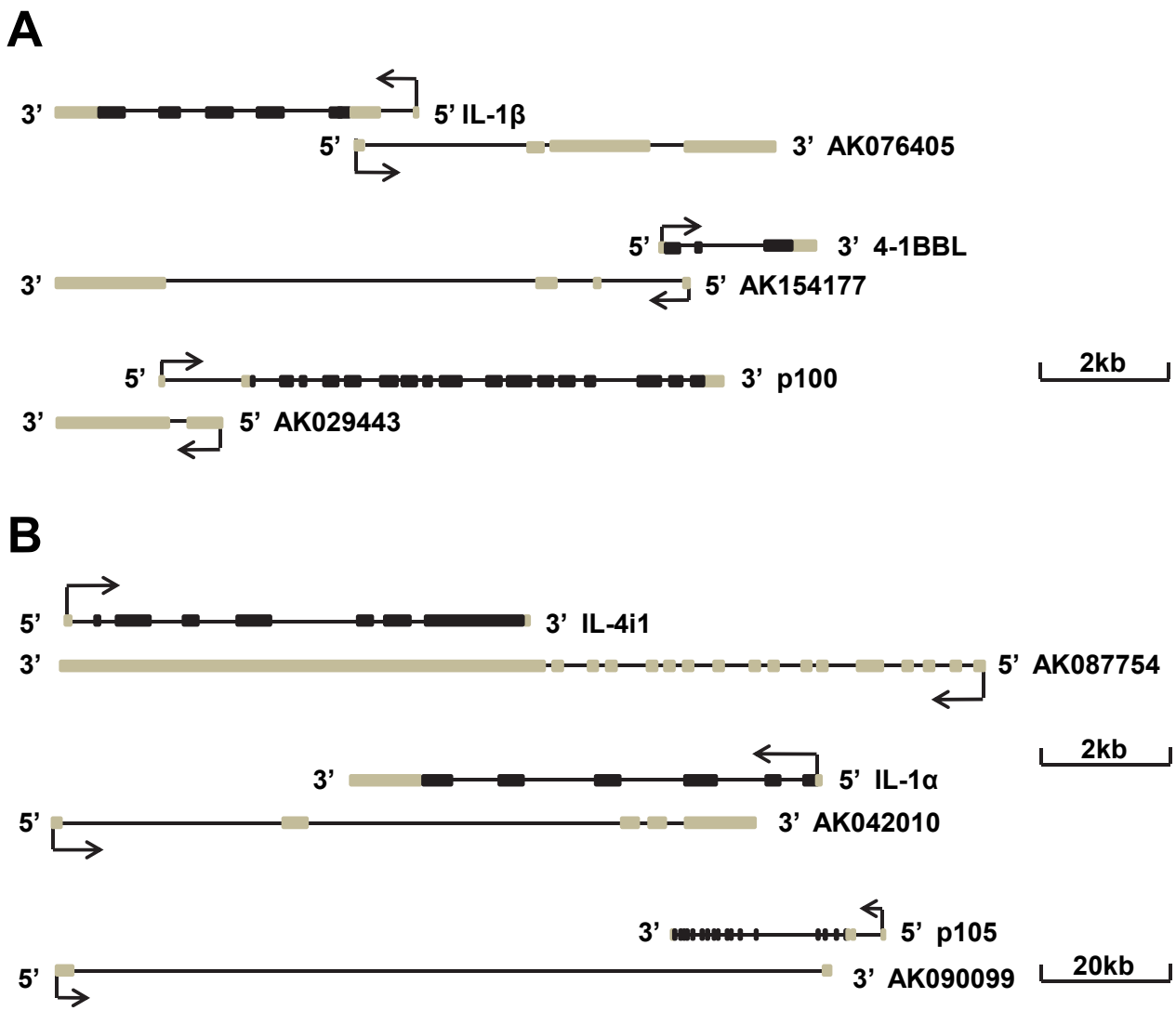

Figure S1. Schematic of anti-IL-1β/IL-1β, and other sense-antisense transcripts.

(A) Head to head sense-antisense transcripts. IL-1β/anti-IL-1β, 4-1BBL/anti-4-1BBL and p100/anti-p100 are shown. **(B)** Tail to tail sense-antisense transcripts. IL-4i1/anti-IL-4i1, IL-1α/anti-IL-1α and p105/anti-p105 are shown. Lines represent gene loci; black boxes represent coding region; grey boxes represent non-coding region.

Figure S2.

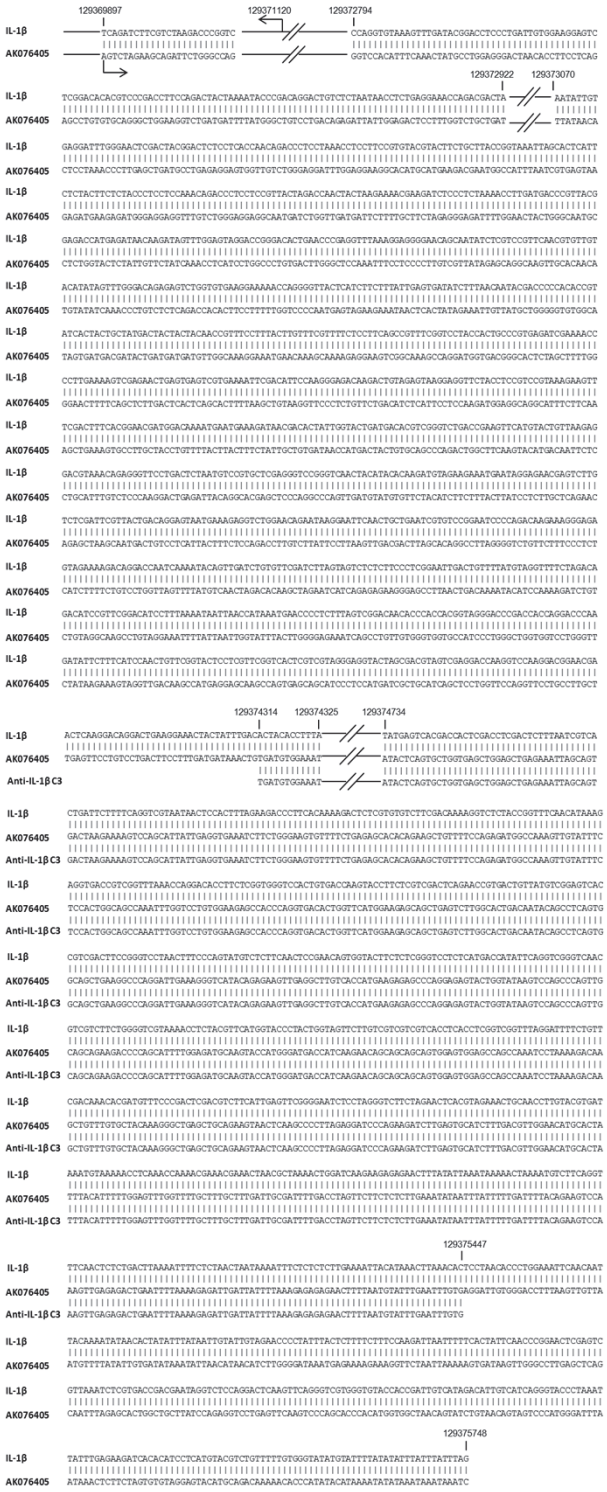

Figure S2. Sequence alignment of anti-IL-1b (clone 3), AK076405, and corresponding genomic sequence at IL-1b locus.

Figure S3.

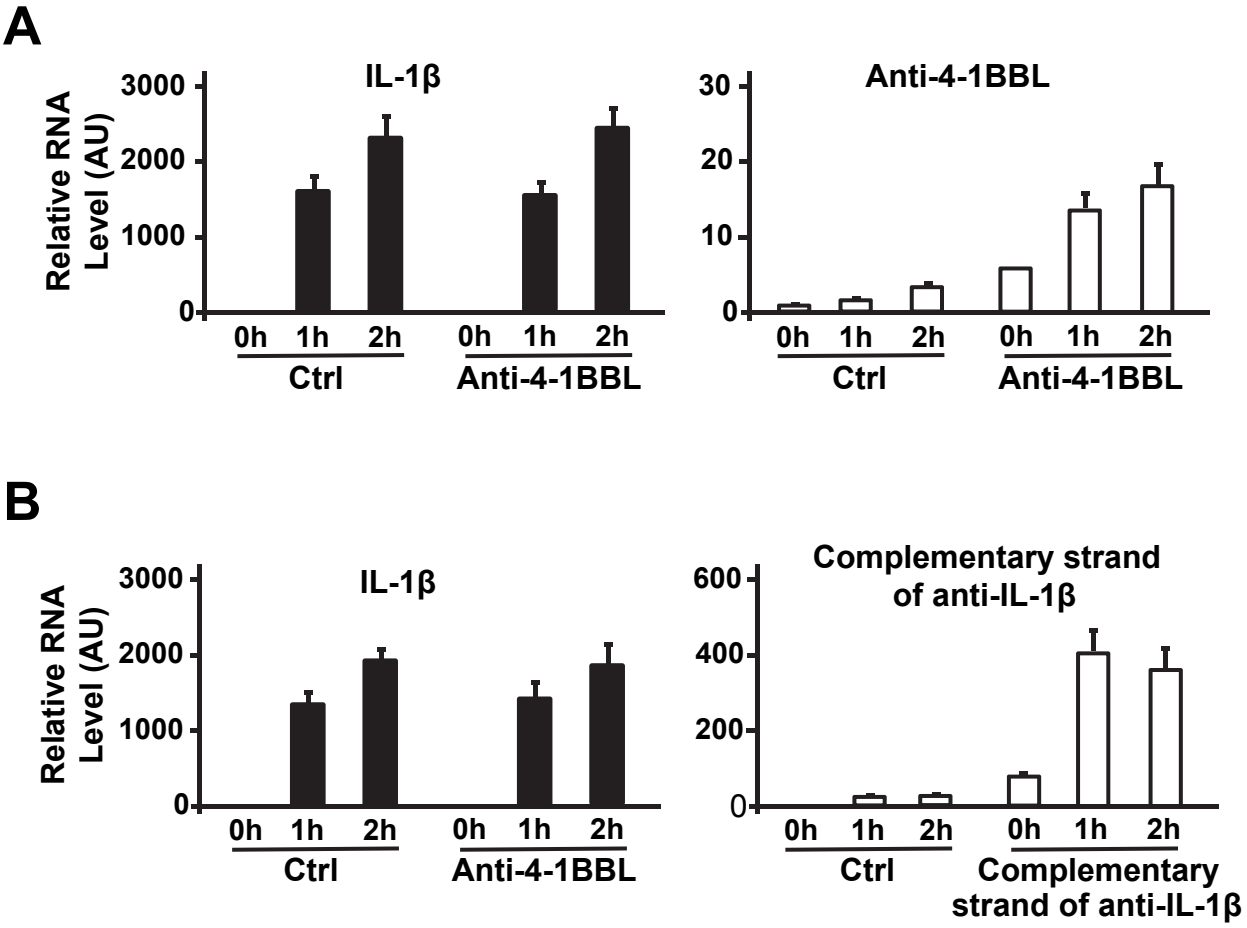

Figure S3. Over-expression of anti-4-1BBL and complementary strand of anti-IL-1β had no effect on LPS-induced IL-1β expression. (A) Effect of anti-4-1BBL on LPS induced IL-1β expression. RAW 264.7 cells were transfected with anti-4-1BBL over-expression vector and selected as a stable line. After treatment with LPS, total RNA was extracted, reverse transcribed to cDNA and analyzed by real-time qPCR. The expression levels of IL-1β and total anti-4-1BBL were converted to absolute unit and normalized to GAPDH. The relative RNA levels were obtained by setting the control samples at time 0 to an abundance of 1. All values were represented as mean±SEM from triplicated samples (n=3). (**B)** Effect of complementary strand of anti-IL-1β on LPS induced IL-1β expression. Samples collected and data presented as in A.

Figure S4.

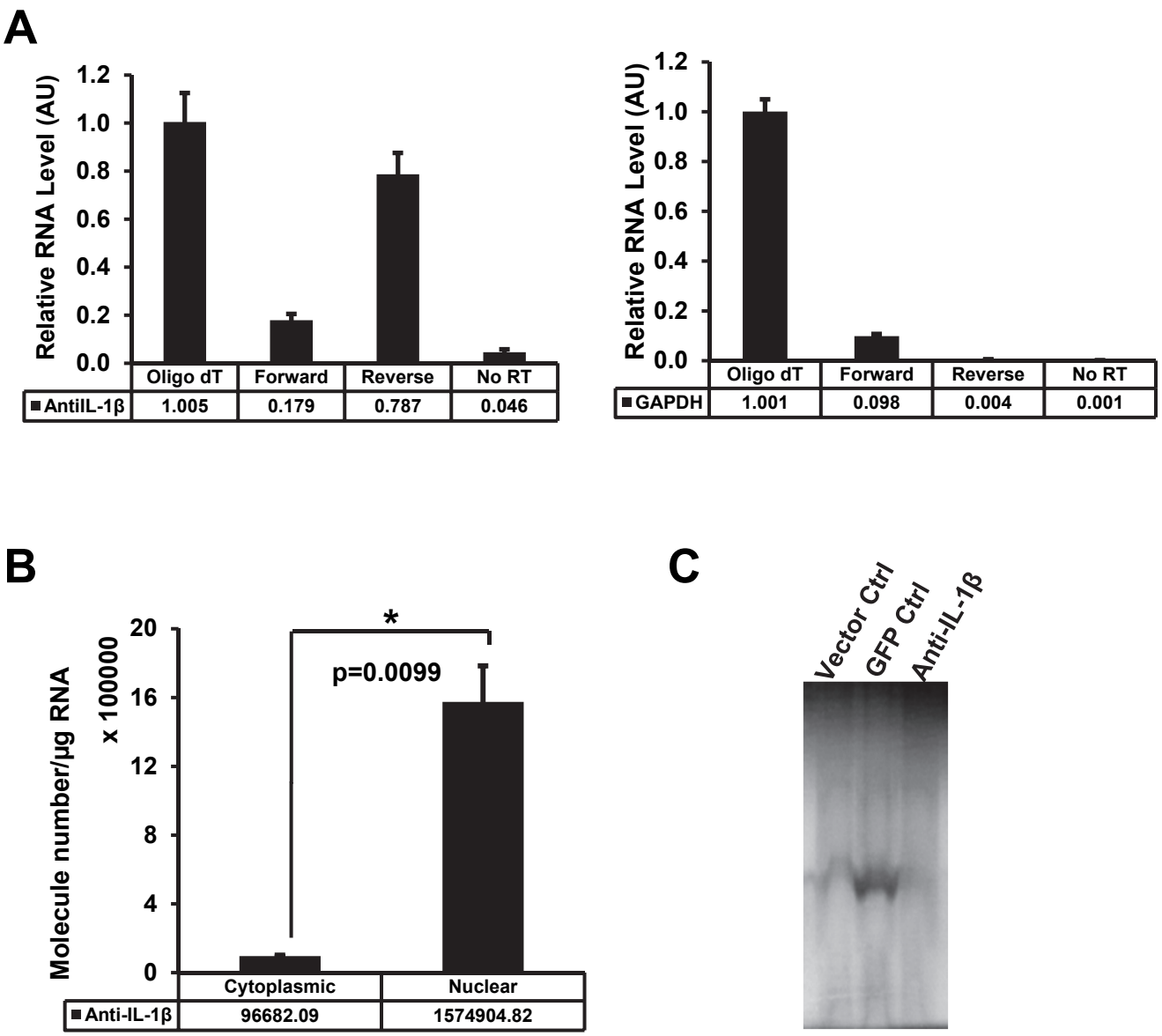

Figure S4. Anti-IL-1β is a non-coding RNA expressed from antisense strand of IL-1β gene and enriched in nucleus. (A) Total RNA was extracted from RAW 264.7 cells and reverse transcribed with oligo dT, forward, or reverse primer of anti-IL-1β. The amounts of anti-IL-1β and GAPDH were quantitated by real-time qPCR. **(B)** RNA was isolated from nuclear and cytoplasmic fractions and reverse transcribed. Real-time PCR was used to quantitate the number of anti-IL-1β molecules from each fraction. Data are the mean ± SEM of triplicates and analyzed by Student's t-test. **(C)** Anti-IL-1β RNA was *in vitro* transcribed and was used to translate protein using an *in vitro* translation system.