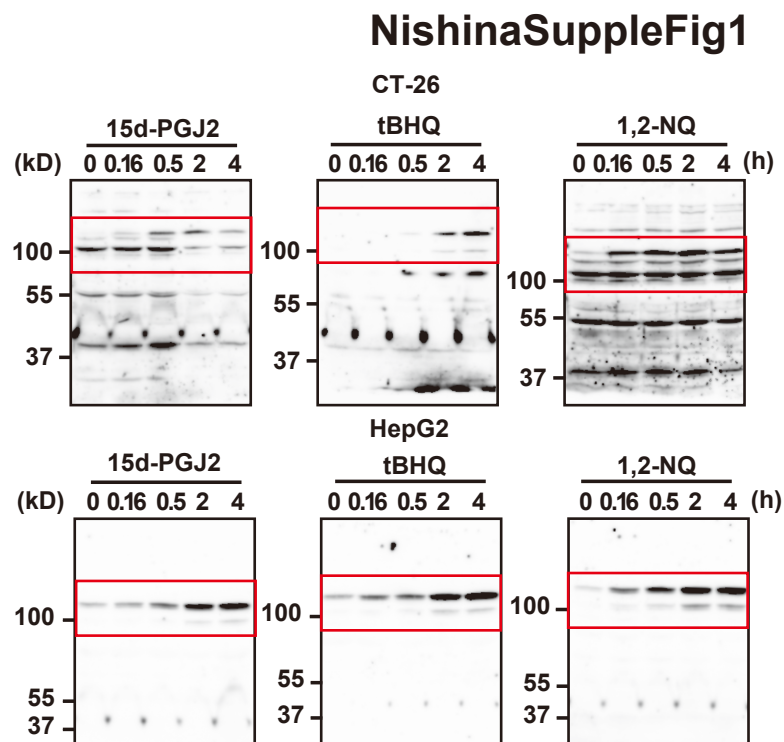


Critical contribution of nuclear factor erythroid 2-related factor 2 (NRF2) to electrophile-induced Interleukin-11 production

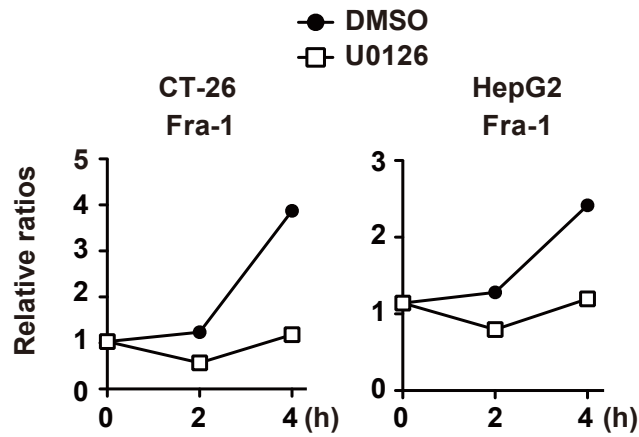
Takashi Nishina<sup>†</sup>, Yutaka Deguchi<sup>†</sup>, Ryosuke Miura<sup>† §</sup>, Soh Yamazaki<sup>†</sup>, Yasuhiro Shinkai<sup>¶</sup>, Yuko Kojima<sup>¶</sup>, Ko Okumura<sup>†</sup>, Yoshito Kumagai<sup>¶</sup>, Hiroyasu Nakano<sup>†</sup>.

### Supplemental Figures



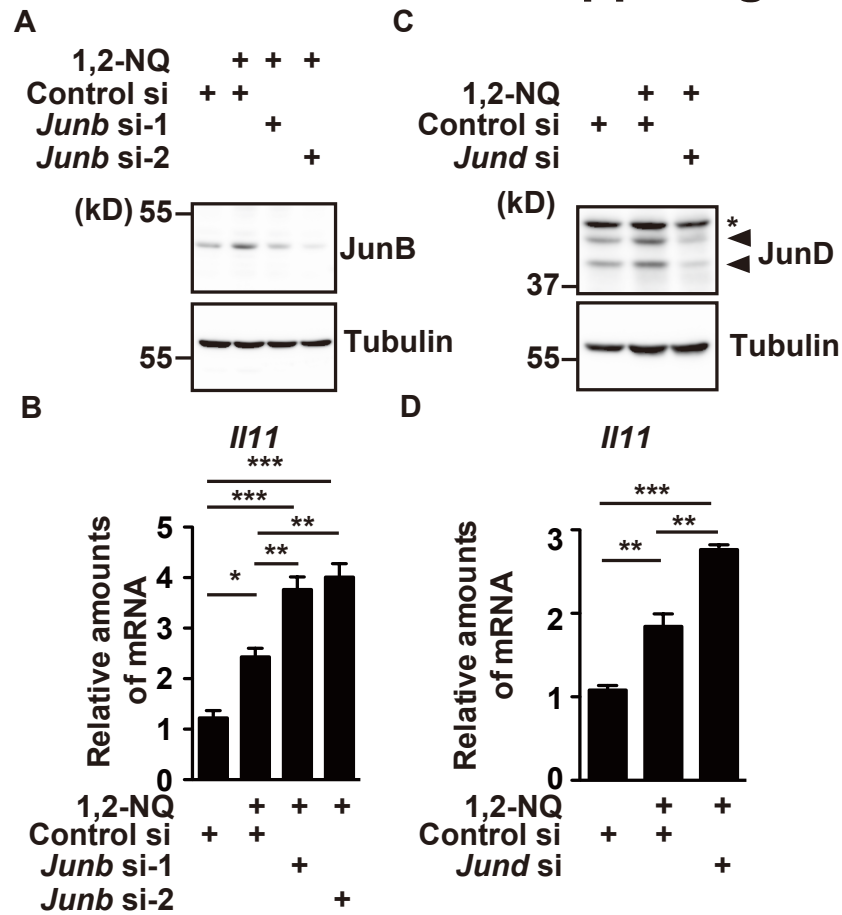
Supplemental Figure 1. **Uncropped images of Western blots with anti-NRF2 antibody used in Figure 1A.** Red boxes indicate cropped images of Western blots in Figure 1A.

## NishinaSuppleFig.2



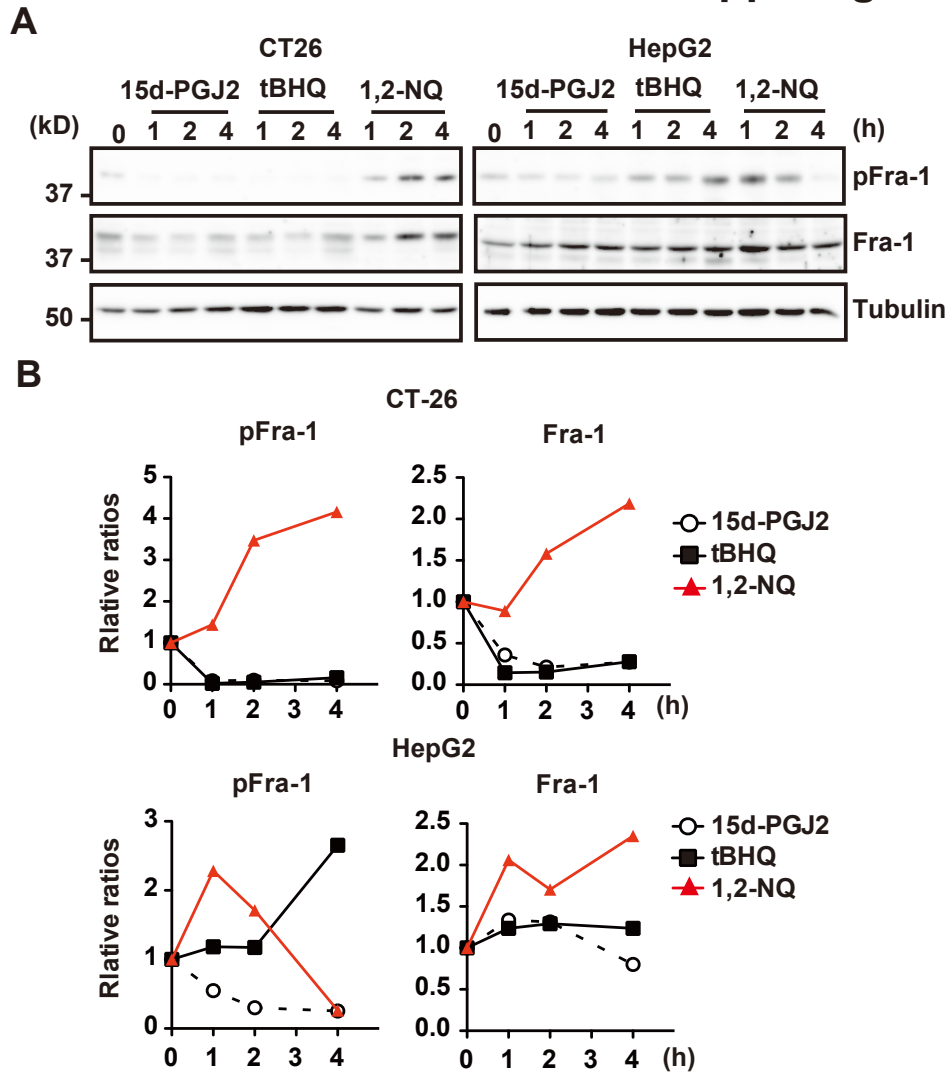
Supplemental Figure 2. **Kinetics of expression of Fra-1 proteins following 1,2-NQ stimulation.** CT-26 and HepG2 cells were stimulated and expression of Fra-1 was analyzed as in Figure 4. Signals of bands corresponding to Fra-1 and tubulin were quantified by ImageJ 1.49 software. Relative ratios of signals of Fra-1 versus those of tubulin were calculated and plotted at the indicated times, respectively. Relative ratios of Fra-1/tubulin at 0 hour is adjusted to be 1.0. All results are representative of two independent experiments.

## Nishina SuppleFig.3



Supplemental Figure 3. **Knockdown of *Junb* or *Jund* does not impair 1,2-NQ-induced *I11* expression.** CT26 cells were transfected with control, *Junb*, or *Jund* siRNAs. At 48 hours after transfection, cells were unstimulated or stimulated with 1,2 NQ (15  $\mu$ M) for 3 hours. Expression of JunB and JunD in control or the indicated siRNAs-treated cells was analyzed by immunoblotting with the indicated antibodies (A, C). Relative amounts of *I11* mRNAs were determined by qPCR (B, D). \* $P < 0.05$ ; \*\* $P < 0.01$ ; \*\*\* $P < 0.001$  compared to untreated or 1,2-NQ treated control siRNA-transfected cells. Asterisk indicates non-specific band. All results are representative of two independent experiments.

## Nishina SuppleFig.4



Supplemental Figure 4. **Kinetics of expression of Fra-1 proteins following electrophile stimulation.** A, CT26 and HepG2 cells were stimulated with 15d-PGJ<sub>2</sub>, tBHQ, or 1,2-NQ as in Figure 2C, and cell lysates were analyzed by immunoblotting with the indicated antibodies. B, Relative ratios of Fra-1/tubulin were calculated, and are expressed as Supplemental Figure 2. All results are representative of two to three independent experiments.