Supplementary Informations

Wogonin reversed resistant human myelogenous leukemia cells via inhibiting Nrf2 signaling by Stat3/NF-κB inactivation

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Supplementary Figure 1A

Supplementary Figure 1B

Supplementary Figure 1. Wogonin decreased p-IKKα and p-IκBα in K562/A02 K562R cells. (A and B) K562/A02 and K562R cells were exposed to various concentrations of Wogonin (10, 20, and 40µM) for 24h. p-IκBα/IκBα and p-IKKα/IKKα was analyzed by Western blot.
Supplementary Figure 2A

Supplementary Figure 2B

**Supplementary Figure 2. Wogonin inhibited Nrf2 and p65 in nucleus in K562/A02 and K562R cells.** (A and B) The expression of nuclear protein p65 and Nrf2 was assessed by Western blot analysis in treatment with 5µM BAY11-7082 for 6h or various concentrations of Wogonin for 24h in K562/A02 and K562R cells, respectively. Nuclear protein expression was normalized to lamin A levels.
**Supplementary Figure 3A**

![Supplementary Figure 3A](image)

**Supplementary Figure 3B**

![Supplementary Figure 3B](image)

**Supplementary Figure 3.** The binding of Nrf2 to ARE was detected by EMSA in various treatment in K562/A02 and K562R cells. (A and B) 40μM Wogonin and 5μM BAY11-7082 reduced the binding of Nrf2 to ARE, respectively. However, the inhibition of the binding of Nrf2 to ARE sites was reversed by treatment with 1μg/ml LPS. Nrf2/ARE DNA binding activity was assessed by EMSA after treatment with 40μM Wogonin or BAY11-7082 in the presence or absence of LPS.
**Supplementary Figure 4A**

![Western blot analysis of p50, p65, and β-actin in K562/A02 cells with silenced p50 or p65, individually and in combination.](image)

**Supplementary Figure 4B**

![Western blot analysis of p50, p65, and β-actin in K562R cells with silenced p50 or p65, individually and in combination.](image)

**Supplementary Figure 4.** p50 and p65 were effectively silenced in K562/A02 and K562R cells. (A and B) K562/A02 and K562R cells were treated by silencing p50 or p65, individually and in combination. K562/A02 and K562R cells were transfected with 50nM of control, p50 or p65 siRNA, or p50 and p65 combined and incubated for 24 hours, respectively. Then the level of p50 and p65 was detected by Western blot analysis in K562/A02 and K562R cells.