Growth inhibitory and pro-apoptotic effects of Hirsuteine in Chronic Myeloid Leukemia cells through targeting Sphingosine kinase 1

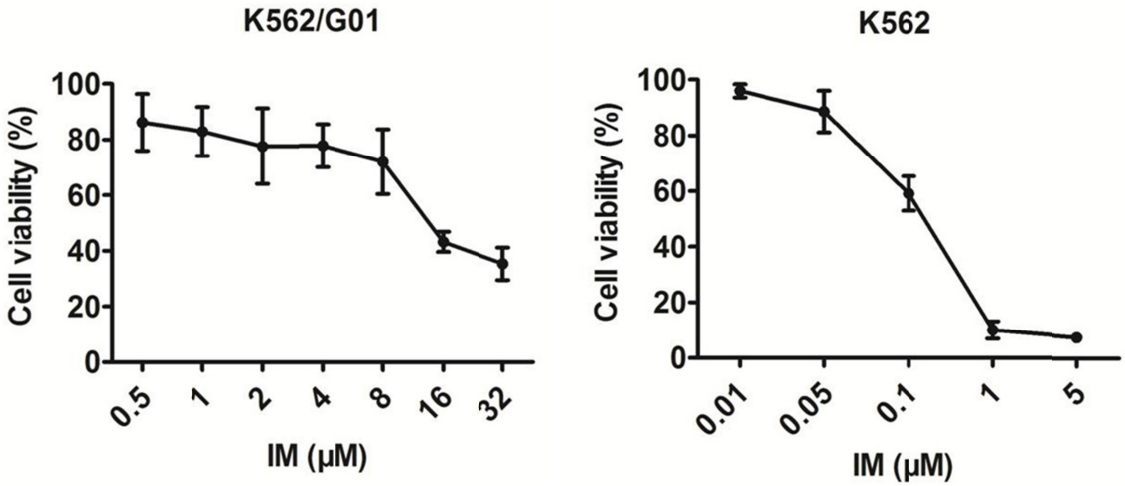
Supplementary Material

Supplementary Table

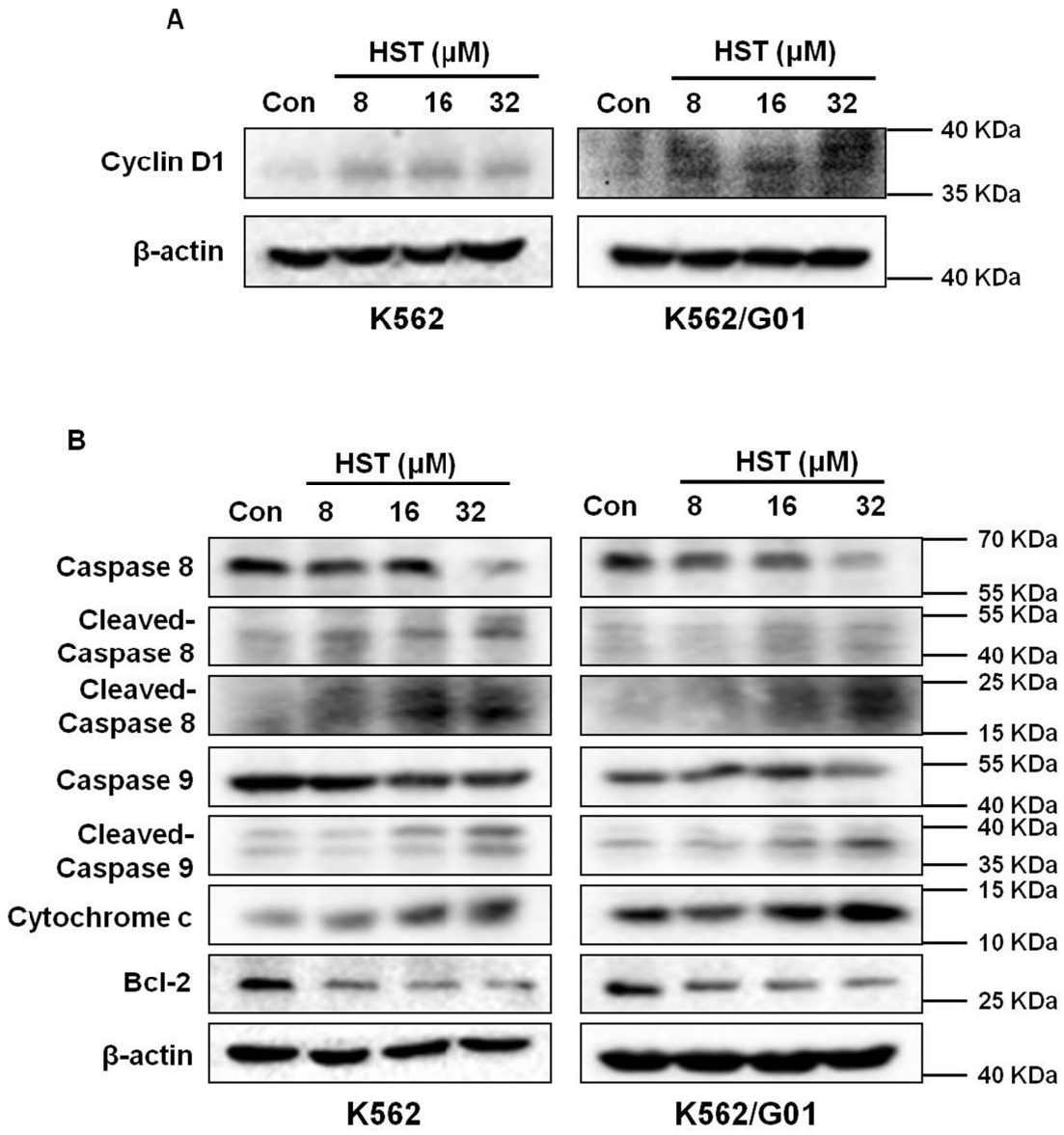
Supplementary Table: Primer sequence list

Gene	Primer sequence
S1PR1 forward	GAGAACAGCATTAAACTGACC
S1PR1 reverse	CCAGGATGATAAAGCAGCAG
S1PR2 forward	CTAGCCAGTTCTGAAAGCC
S1PR2 reverse	GGTATAATTATAGTGTTCCTGGACC
S1PR3 forward	CCAAGCAGAAGTAAATCAAGCA
S1PR3 reverse	CTTCCTTGACCTTCGGAGAG
S1PR4 forward	CTACATCCTCTTCTGCCTG
S1PR4 reverse	ATAGAGGCCCATGATGGTG
S1PR5 forward	ATCTAGCCGTGTTGTTGGT
S1PR5 reverse	CAGGAGTACAGGACAGGTG
GAPDH forward	CATGAGAAGTATGACAACAGCCT
GAPDH reverse	AGTCCTTCCACGATACCAAAGT

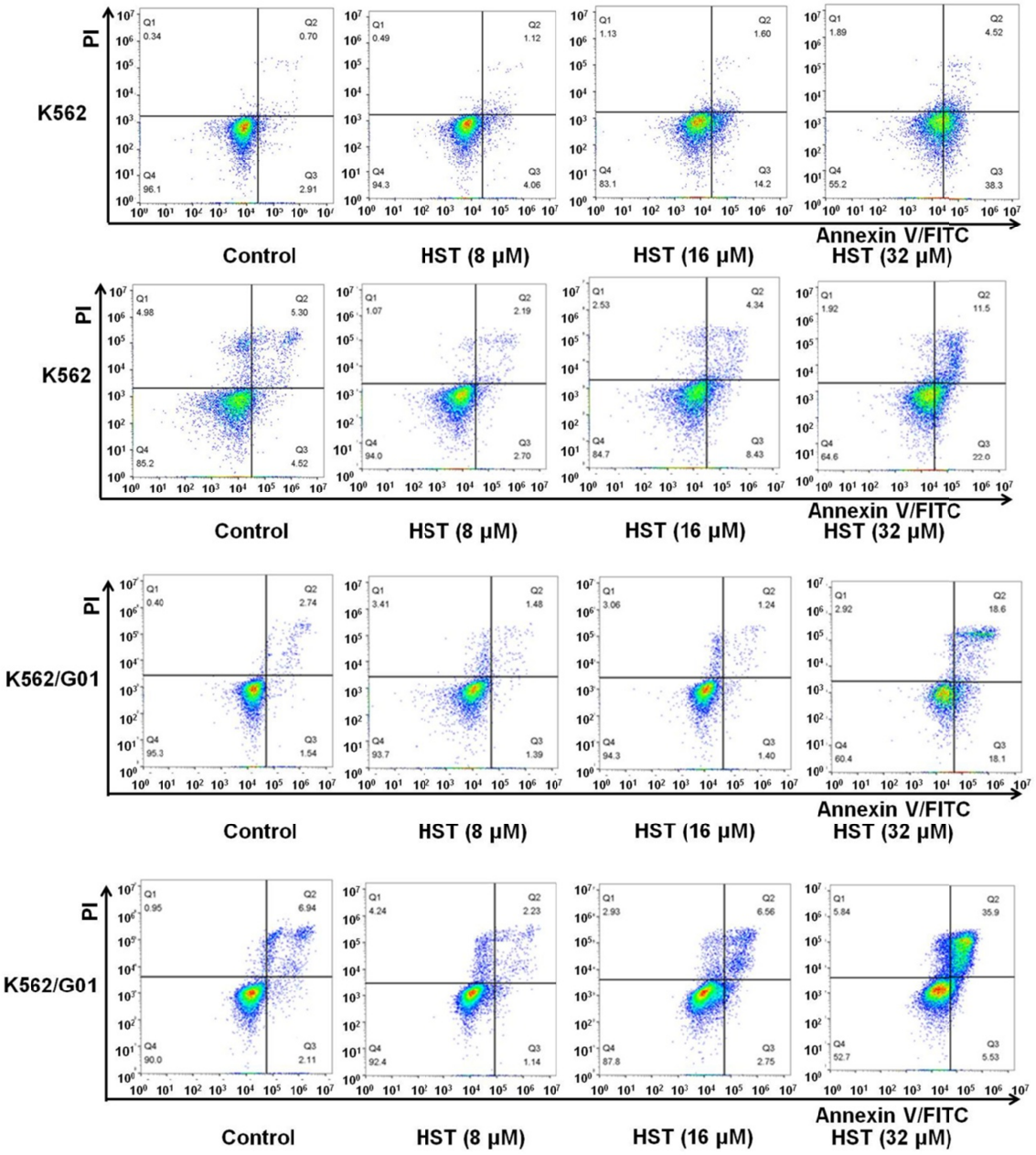
Supplementary Figures



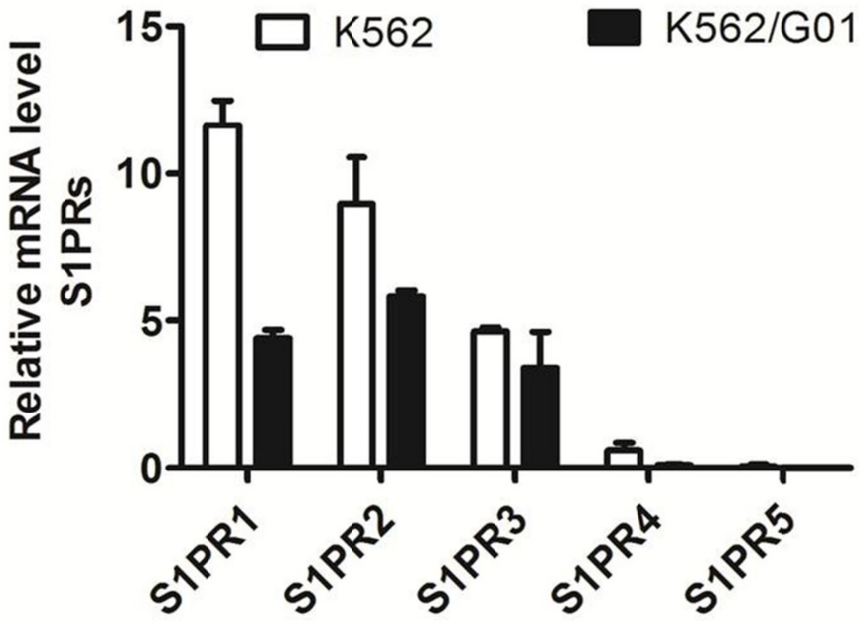
Supplementary Figure 1: The MDR characteristics of K562/G01 cells. K562 and K562/G01 cells were treated with indicated doses of Imatinib (IM) for 48 h, the cell viability was determined by MTT assay.



Supplementary Figure 2: Cell cycle arrest and pro-apoptotic effects of HST in CML cells. K562 and K562/G01 cells were treated with HST for 48 h, western blot was performed. (A) Cell cycle regulator, Cyclin D1, was determined. (B) Cell apoptosis effectors, Caspase 8, Caspase 9, Cytochrome c and Bcl-2, were determined.



Supplementary Figure 3: Pro-apoptotic effect of HST in CML cells. K562 and K562/G01 cell apoptosis were analyzed by flow cytometry after 48 h-treatment of increasing HST.



Supplementary Figure 4: S1PRs levels in CML cells. S1PR1-5 expression levels of K562 and K562/G01 cells were analyzed by qRT-PCR.