

	<b>Myosin-9 expression</b>	<b>mRNA IC<sub>50</sub> of HHT(ng ml<sup>-1</sup>)</b>
<b>Kasumi-1</b>	1 ± 0.12	16.06 ± 3.17
<b>HL-60</b>	3.36 ± 0.24	16.92 ± 4.22
<b>K562</b>	0.85 ± 0.36	38.42 ± 5.68
<b>U937</b>	2.87 ± 0.47	22.64 ± 5.14
<b>THP-1</b>	4.89 ± 0.54	29.48 ± 6.01
<b>Patients1</b>	7.18 ± 1.03	10.32 ± 2.76
<b>Patients2</b>	4.41 ± 0.85	15.76 ± 3.49
<b>Patients3</b>	2.18 ± 0.28	16.09 ± 4.08

**Supplementary table1. The baseline expression of myosin-9 and IC50 values of HHT in AML cells.** The level of myosin-9 mRNA in a selection of AML cell lines and human primary hematopoietic stem/progenitor cells was examined by real-time PCR. The myosin-9 mRNA expression in Kasumi-1 was used as control. The data are presented the mean ± S.D. of the results from six independent experiments

## Supplementary Method

### Quantitative polymerase chain reaction (qPCR)

The expression level of the myosin-9 gene was determined using reverse transcription-qPCR with SYBR Green I [Takara Biotechnology, Dalian, China], and GAPDH was used as a reference gene. Total RNA was extracted using TRIzol (Invitrogen Life Technologies, Carlsbad, CA, USA) and reverse transcribed into cDNA by a SuperScript II first-strand cDNA synthesis kit (Invitrogen Life Technologies). The reaction system contained 12.5  $\mu$ l 2X SYBR Premix Ex Taq [Takara Biotechnology], 1  $\mu$ l cDNAs and 10 pmol of each primer. The reaction was performed at 95  $^{\circ}$ C for 1 min, followed by 40 cycles of denaturation at 95  $^{\circ}$ C for 15 sec and annealing/extension at 60  $^{\circ}$ C for 60 sec, on an iQ5 Real-Time PCR instrument (Bio-Rad Laboratories, Hercules, CA, USA).

The primer sequences were as follows:

Forward, 5'-ATGGGGAAGGTGAAGGTCG-3' and reverse,

5'-GGGTCATTGATGGCAACAATATC-3' for GAPDH; Forward, 5'-

ACCCGTGGTGGAAGTACTGAC -3' and reverse, 5'- CATCTACCGACTGGTTGTGA

-3' for myosin-9.