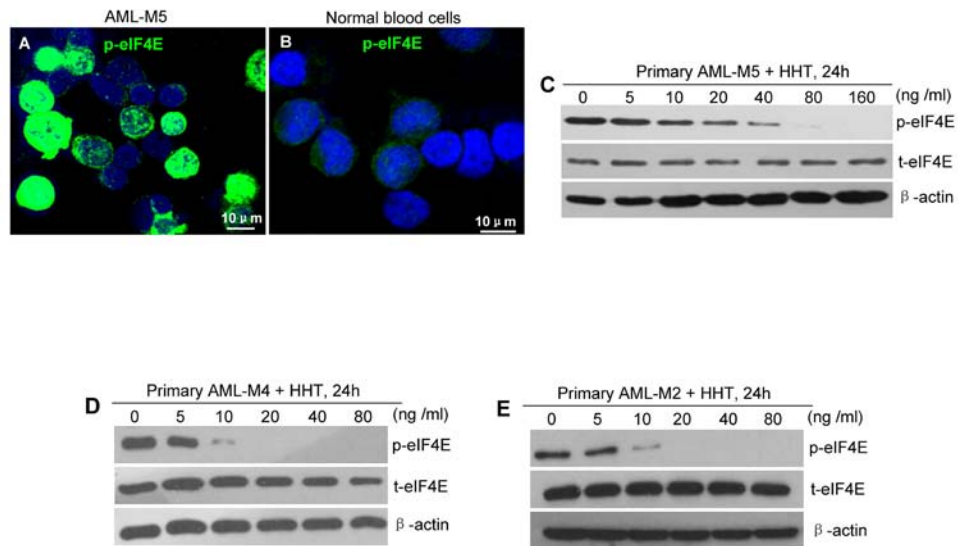
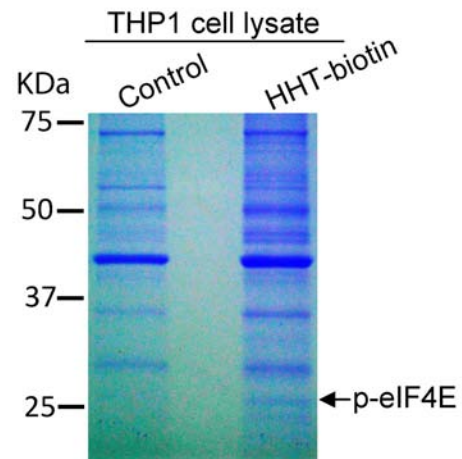


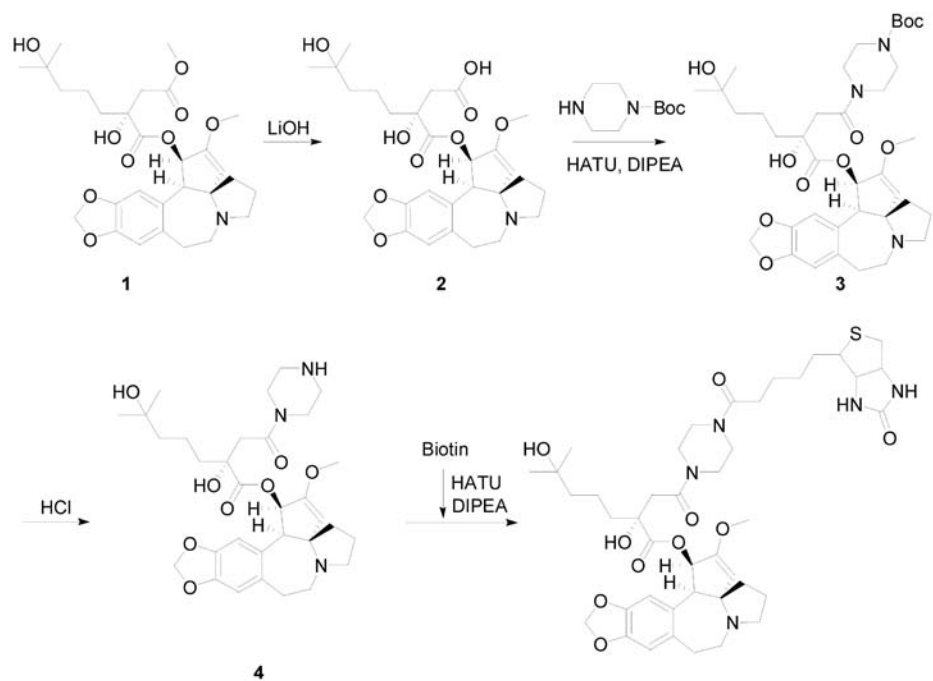
## SUPPLEMENTARY FIGURES AND TABLE



**Supplementary Figure S1: p-eIF4E is highly expressed in primary leukemia cells of AML patients and reduced by HHT.** (A–B) Images of immunofluorescence staining of p-eIF4E from primary AML-M5 cells **A**, and normal blood cells **B**. Green: p-eIF4E. Blue: cell nucleus visualized by DAPI. (C–E) HHT selectively reduced p-eIF4E in a dose-dependent manner but did not affect t-eIF4E of AML primary leukemia cells. Primary leukemia cells were treated with HHT at indicated concentrations for 24 h and then collected for analyses of p-eIF4E and t-eIF4E.  $\beta$ -actin was used as loading control.

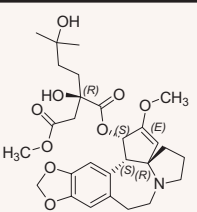
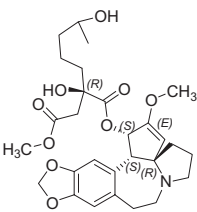
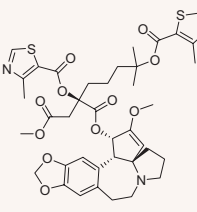
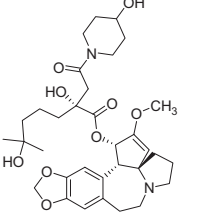
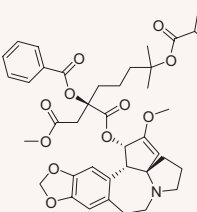
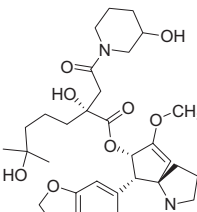


**Supplementary Figure S2: Identification of p-eIF4E protein that interacts with HHT.** Cell lysates from THP1 cells were incubated with HHT-biotin or biotin followed by co-precipitated with streptavidin agarose resin. Co-precipitated complexes were separated by SDS-polyacrylamine gel electrophoresis (SDS-PAGE) and coomassie brilliant blue staining. The identification of eIF4E was achieved by mass spectroscopic analysis.



Supplementary Figure S3: The structure of HHT-biotin and its preparation procedure.

Supplementary Table S1. Bioactivities of HHT and its analogs

Entry	Structure	IC50 (ng/ml)	
		p-eIF4E level	THP-1 proliferation
HHT C <sub>29</sub> H <sub>39</sub> NO <sub>9</sub> MW:545.62		64.54	9.72
HT C <sub>28</sub> H <sub>37</sub> NO <sub>9</sub> MW:545.62		113.36	24.06
H0722 C <sub>39</sub> H <sub>45</sub> N <sub>3</sub> O <sub>11</sub> S <sub>2</sub> MW:795.9		306.55	460.8
H021 C <sub>33</sub> H <sub>46</sub> N <sub>2</sub> O <sub>9</sub> MW:614.7		1280.93	7466.74
H0732 C <sub>43</sub> H <sub>47</sub> NO <sub>11</sub> MW:753.8		804.72	3284.59
H025 C <sub>33</sub> H <sub>46</sub> N <sub>2</sub> O <sub>9</sub> MW:614.7		676.43	5434.63