

SUPPLEMENTARY FIGURES

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Supplementary Figure 1. Sequences of Np17 mRNA and open reading frame (ORF). Np17mRNA: gi|34526700|dbj|AK129982.1|, Homo sapiens cDNA FLJ26472 fis, clone KDN04506 (2501bp). ORF sequence is highlighted by blue color.

A	Human Np17	1	MRLLPRTSIPRRQPF SRWRKQNLKTPVSLNCSRSCKLLEGRGMPAIFIIALPPPNTIGGP	60
	Chimpanzee Np17	1	MRLLPRTSIPRRQPF SRWRKQNLKTPVSLNCSRSCKLLEGRG PAIFIIALPPPNTIGGP	60
	Human Np17	61	ALIISLQVYPAAPERQRPARRGHDDGGGFVKTKMGICREKKERSDCYCVYIEREDIRDSI	120
	Chimpanzee Np17	61	ALIISLQVY SAAPERQRPARRGHDDGGGFVKTKMGICREKKERSDCYCVYIEREDIRDSI	120
	Human Np17	121	LKKTCTLNNCF AEMLLICSFAPATLPQPL	149
	Chimpanzee Np17	121	LKTCTLKNCF AEMLLICSFAPATLPQPL	149
B	Human Np17	1	MRLLPRTSIPRRQPF SRWRKQNLKTPVSLNCSRSCKLLEGRGMPAIFIIALPPPNTIGGP	60
	Gorilla Np17	1	MRLLPRTSIPRRQPF SR RQNLKTPVSLNCSRSCKLLEGRGMPAIFIIALPPPNTIGGP	35
	Human Np17	61	ALIISLQVYPAAPERQRPARRGHDDGGGFVKTKMGICREKKERSDCYCVYIEREDIRDSI	120
	Gorilla Np17	36	-----LQVYPAAPERQRPARRGHNDGAGFVKKKRGICREKKE--DCYCVYIEKEDIRDSI	88
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	Gorilla Np17	89	LKKACTLNNF AEMLLICSFAPATLPQPL	117

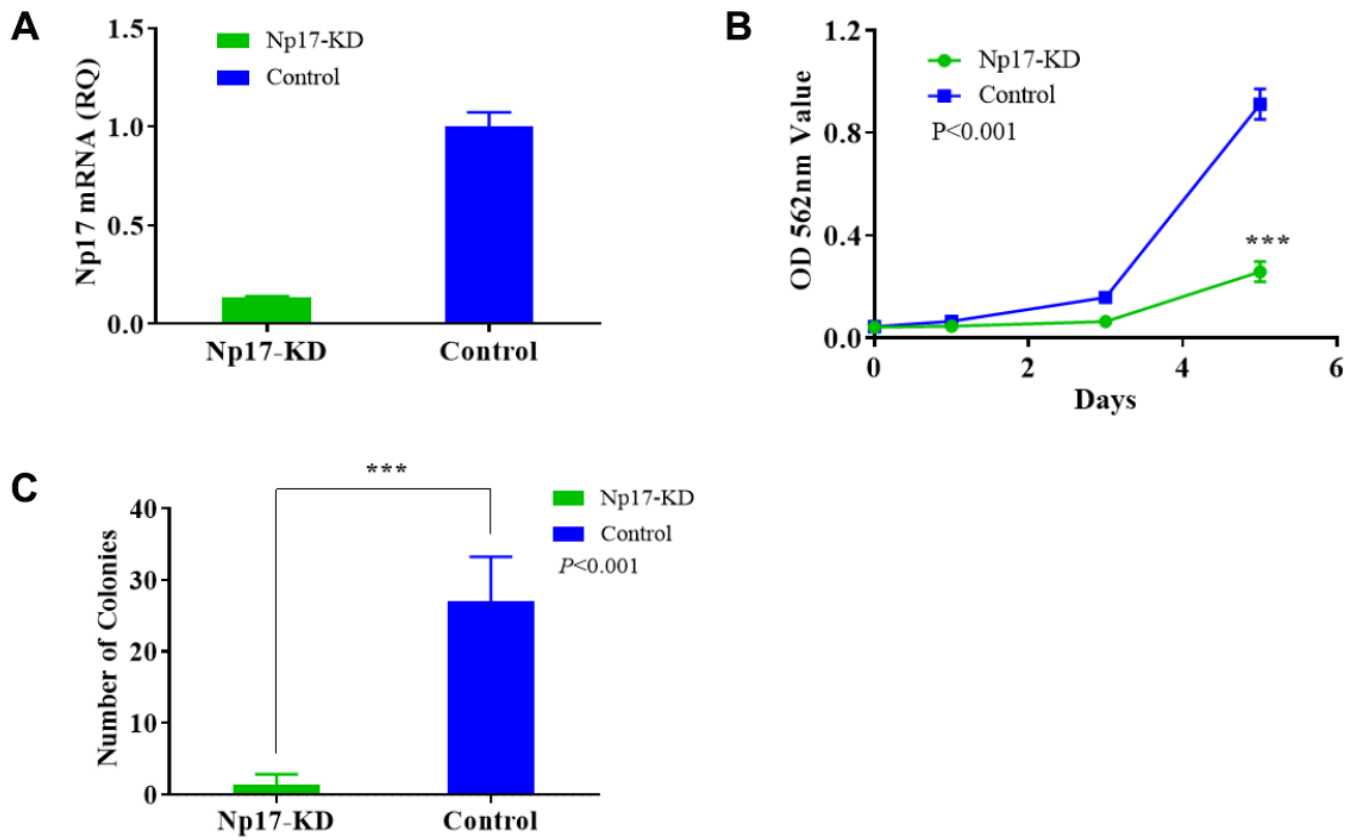
Supplementary Figure 2. Amino acid sequence alignments of Np17. (A, B) Amino acid sequence alignments of human Np17 with Chimpanzee (A) and Gorilla (B) Np17.

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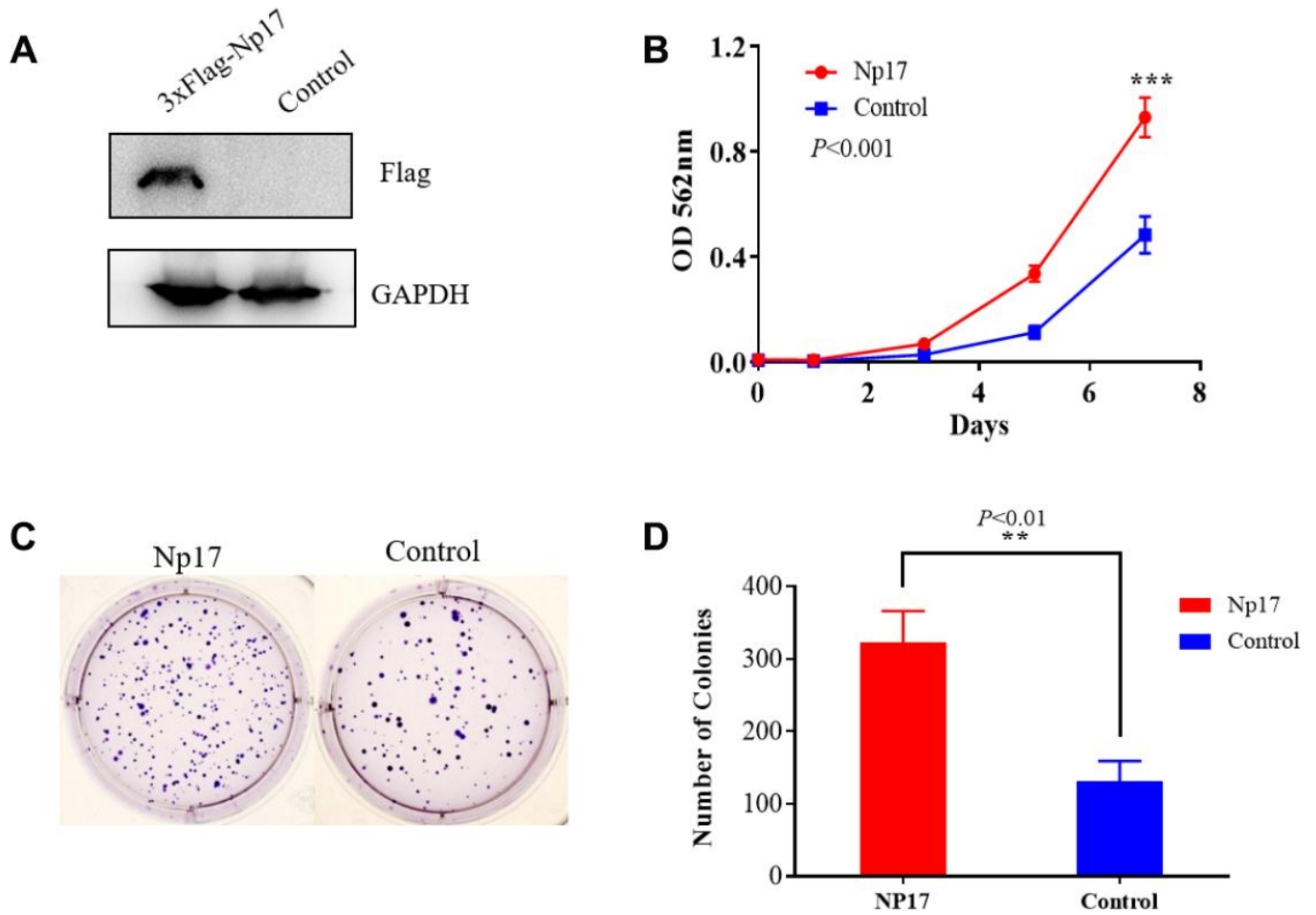
*      20      *      40      *      60      *      80      *      100     *      120     *      140
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NB4-2 : ..... : 149
NB4-3 : ..... : 149
NB4-4 : ..... : 149
KCL-22M1 : ..... : 149
KCL-22M2 : ..... : 149
K562-1 : ..... : 149
K562-2 : ..... S ..... R ..... : 149
K562-3 : ..... S ..... R ..... : 149
K562-4 : ..... S ..... R ..... : 149
K562-5 : ..... R ..... : 149
Jurkat1 : ..... : 149
Jurkat2 : ..... D ..... : 149
Jurkat3 : ..... F ..... : 149
Jurkat4 : ..... : 149
Raji1 : ..... A ..... : 149
Raji2 : ..... : 149
U937-1 : ..... : 149
U937-2 : ..... G ..... : 149
U937-3 : ..... : 149
U937-4 : ..... G ..... : 149
NFB-W1 : ..... E ..... : 149
NFB-W2 : ..... : 149
NFB-W3 : ..... S ..... : 149
NFB-G1 : ..... : 149
NFB-G2 : ..... : 149
NFB-G3 : ..... E ..... : 149
NFB-G4 : ..... A ..... : 149
NFB-G5 : ..... : 149
NFB-X1 : ..... E ..... : 149
NFB-X2 : ..... : 149
NFB-X3 : ..... : 149
NFB-X4 : ..... : 149
NFB-H1 : ..... : 149
NFB-H2 : ..... R ..... : 149
NFB-H3 : ..... : 149
NFB-H4 : ..... : 149
NFB-H5 : ..... : 149
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NFB-Z4 : ..... : 149

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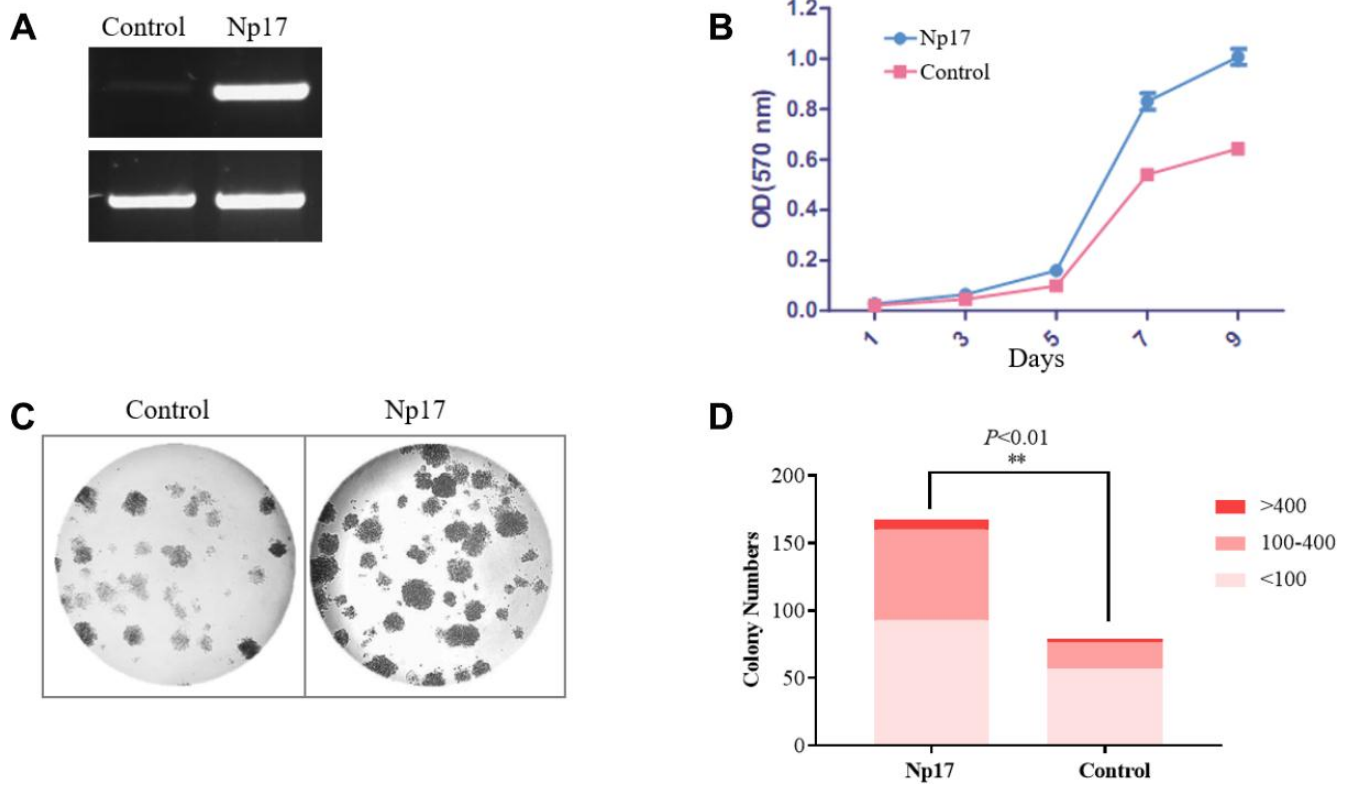
Supplementary Figure 3. AA alignment of Np17 proteins of 42 cDNA clones from various leukemia cell lines and normal individuals.



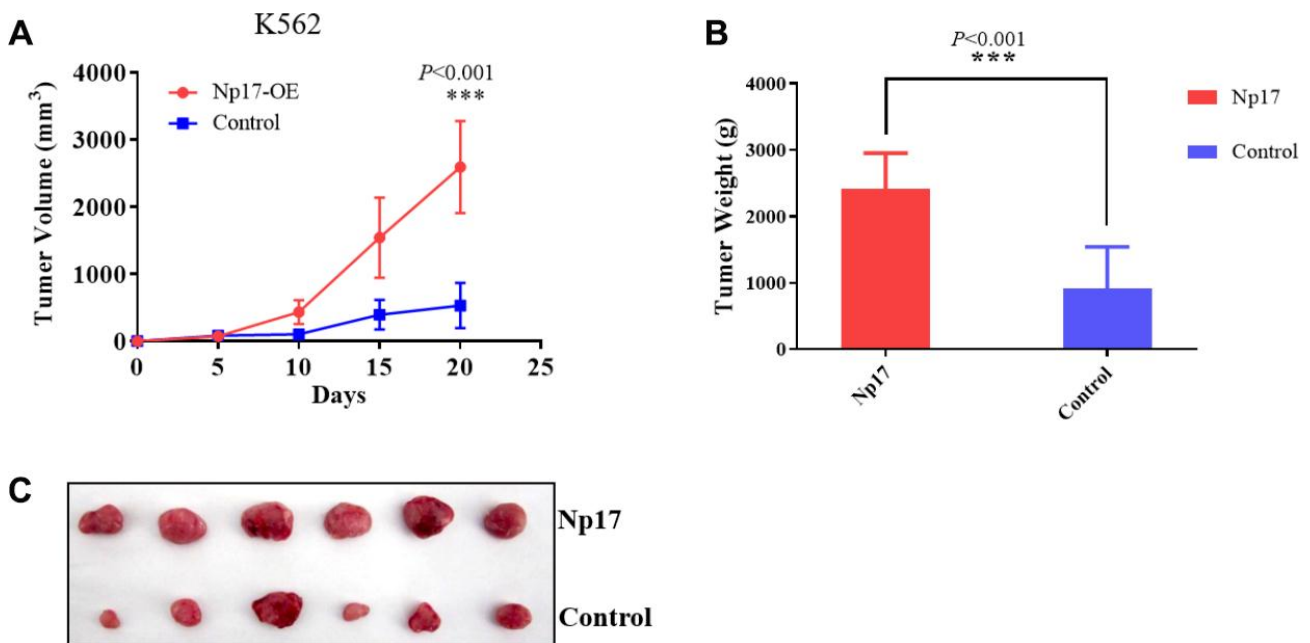
Supplementary Figure 4. Knock-down of Np17 inhibits growth of leukemia cells. (A) qRT-PCR showed that shRNA reduced np17 mRNA levels. (B) Np17-KD inhibited the growth of NB4 cells. (C) Np17-KD decreased colony numbers of NB4 cells.



Supplementary Figure 5. Overexpression of Np17 promotes the growth of AML cells. (A) Western blotting analysis of Np17 levels in MOLM-13 cells after Np17 overexpression (Np17-OE). (B) Comparison of proliferation curves of Np17 overexpression with control in MOLM-13 cells. (C, D) Representative images and quantification of colony numbers of Np17-OE compared with control in MOLM-13 cells.



Supplementary Figure 6. Overexpression of Np17 promotes proliferation and colony forming potential of tumor cells of CML blast crisis. (A) PCR analysis of Np17 levels in K562 cells. (B) Comparison of proliferation curves between Np17- overexpressing K562 cells and control cells. (C, D) Representative images and quantification of colony numbers in K562 cells Np17-OE compared with control.



Supplementary Figure 7. Overexpression of Np17 promotes the growth of leukemia cells in nude mice. (A) Tumor volume comparison between Np17-OE and control (n=6). (B) Tumor weight comparison between Np17- OE and control at the end of experiments (n=6). (C) Representatives images of xenografts of Np17-OE and controls.