

**Supplemental Information**

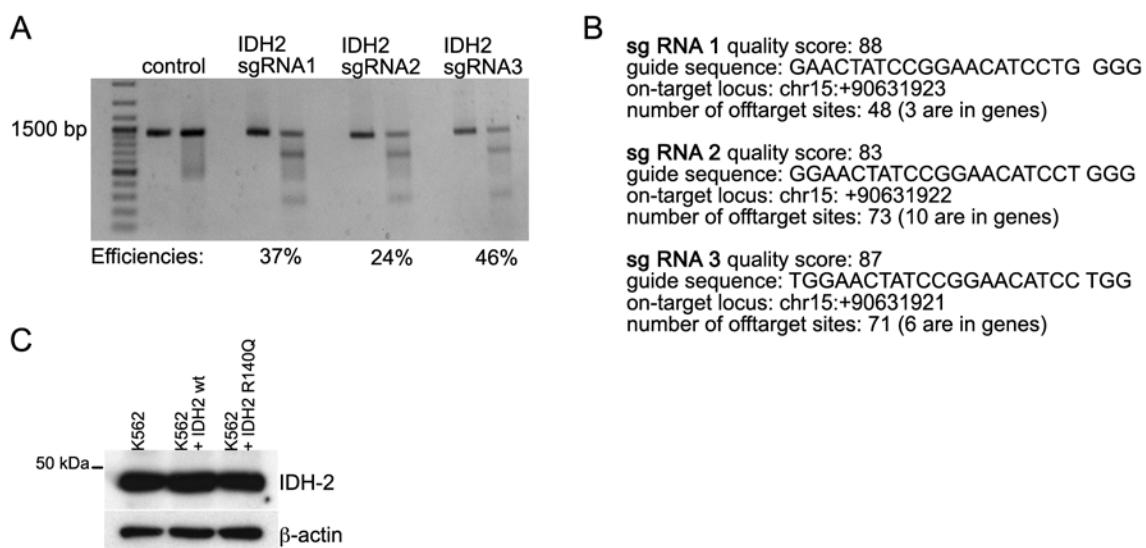
**RNA-Guided CRISPR-Cas9 System-Mediated  
Engineering of Acute Myeloid Leukemia Mutations**

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Supplementary Information:

sgRNA	sequence
IDH 2 sgRNA 1 top	CACCGAACTATCCGGAACATCCTG
IDH 2 sgRNA 1 bot	AAACCAGGATGTTCCGGATAGTTC
IDH 2 sgRNA 2 top	CACCGAACTATCCGGAACATCCT
IDH 2 sgRNA 2 bot	AAACAGGATGTTCCGGATAGTTC
IDH 2 sgRNA 3 top	CACCGTGGAACTATCCGGAACATCC
IDH 2 sgRNA 3 bot	AAACGGATGTTCCGGATAGTCCAC
mutant IDH 2 sgRNA 1 top	CACCGAACTATCCAGAACATCCTG
mutant IDH 2 sgRNA 1 bot	AAACCAGGATGTTCTGGATAGTTC

**Table S1.** sgRNA sequences. Small guide (sg) RNAs according to published criteria mapping to different introns/exons of the gene IDH2.



**Figure S1.** A) Surveyor nuclease assay for detection of indels induced by sgRNAs 1-3. B) Analysis for off-target sites of sgRNAs 1-3 using the website [www.crispr.mit.edu](http://www.crispr.mit.edu) (Zhang lab, MIT 2015). C) Western blot analysis showing IDH2 protein expression levels in human K562 leukemia cells before and after successful genome editing as indicated.