



Supplementary Figure 2. Assessment of optimal one-step RT-qPCR System for testing fusion gene transcripts on the *StepOne Plus™ Real-Time PCR System*. Reactions of *ETV6-RUNX1*, *KMT2A-AFF1*, *BCR-ABL1p190* and *TCF3-PBX1* were prepared from RNA of cell lines using different commercially available kits according to the manufacturers' instructions. A) FastGene® PROBE One Step. B) AgPath-ID One-Step RT-PCR Reagents. C) Superscript III One-Step RT-PCR. D) QuantiTect Probe RT-PCR. E) Results of RT-PCR are in cycle threshold (Ct) for each fusion gene transcript and kit

Fusion gene	<i>ETV6-AML1</i>	<i>TCF3-PBX1</i>	<i>BCR-ABL1p190</i>	<i>KMT2A-AFF1</i>	<i>GAPDH</i>
Dye	NED	VIC	NED	VIC	FAM
<i>FastGene PROBE One Step</i>	35.5	31.9	34.0	35.7	25.9
<i>AgPath-ID One-Step RT-PCR</i>	30.9	28.2	29.3	33.0	24.1
<i>SuperScript III Platinum One-Step qRT-PCR</i>	31.7	26.7	32.8	35.1	21.8
<i>QuantiTect Probe RT-PCR</i>	26.2	23.8	25.4	27.5	16.7