

Supplementary Table 7. MIQE checklist (Bustin *et al*, 2009)

Item to check	Importance	checklist	Item to check	Importance	checklist
Experimental design			qPCR oligonucleotides		
Definition of experimental groups	E	Materials & Methods	Primer sequences	E	Materials & Methods
Number within each group	E	Materials & Methods	RTPrimerDB identification number	D	NA
Assay carried out by the core or investigator's laboratory?	D	ND	Probe sequences	D	Materials & Methods
Acknowledgment of authors' contributions	D	ND	Location and identity of any modifications	E	Materials & Methods
Sample			Manufacturer of oligonucleotides	D	ND
Description	E	Materials & Methods	Purification method	D	ND
Volume/mass of sample processed	D	Materials & Methods	qPCR protocol		
Microdissection or macrodissection	E	NA	Complete reaction conditions	E	Materials & Methods
Processing procedure	E	Materials & Methods	Reaction volume and amount of cDNA	E	Materials & Methods
If frozen, how and how quickly?	E	Materials & Methods	Primer, (probe), Mg ²⁺ , and dNTP concentrations	E	Materials & Methods
If fixed, with what and how quickly?	E	NA	Polymerase identity and concentration	E	Materials & Methods
Sample storage conditions and duration (especially for FFPEb samples)	E	Materials & Methods	Buffer/kit identity and manufacturer	E	Materials & Methods
Nucleic acid extraction			Exact chemical composition of the buffer	D	Proprietary
Procedure and/or instrumentation	E	Materials & Methods	Additives (SYBR Green I, DMSO, and so forth)	E	NA
Name of kit and details of any modifications	E	Materials & Methods	Manufacturer of plates/tubes and catalog number	D	ND
Source of additional reagents used	D	NA	Complete thermocycling parameters	E	Materials & Methods
Details of DNase or RNase treatment	E	NA	Reaction setup (manual/robotic)	D	Materials & Methods
Contamination assessment (DNA or RNA)	E	ND	Manufacturer of qPCR instrument	E	Materials & Methods
Nucleic acid quantification	E	Materials & Methods	qPCR validation		
Instrument and method	E	Materials & Methods	Evidence of optimization (from gradients)	D	Materials & Methods
Purity (A ₂₆₀ /A ₂₈₀)	D	ND	Specificity (gel, sequence, melt, or digest)	E	Materials & Methods
Yield	D	ND	For SYBR Green I, C _q of the NTC	E	NA
RNA integrity: method instrument	E	ND	Calibration curves with slope and y intercept	E	Table 3
RIN/RQI or C _q of 3' and 5' transcripts	E	ND	PCR efficiency calculated from slope	E	Table 3
Electrophoresis traces	D	NA	Confidence Intervals for PCR efficiency or Standard Error	D	ND
Inhibition testing (C _q dilutions, spike, or other)	E	Materials & Methods	R ² of calibration curve	E	Table 3
Reverse transcription			Linear dynamic range	E	Table 3
Complete reaction conditions	E	Materials & Methods	C _q variation at LOD	E	Table 3
Amount of RNA and reaction volume	E	Materials & Methods	Confidence Intervals throughout range	D	ND
Priming oligonucleotide (if using GSP) and concentration	E	NA	Evidence for LOD	E	Table S4
Reverse transcriptase and concentration	E	NA	If multiplex, efficiency and LOD of each assay	E	NA
Temperature and time	E	Materials & Methods	Data analysis		
Manufacturer of reagents and catalogue numbers	D	Materials & Methods	qPCR analysis program (source, version)	E	Materials & Methods
C _q s with and without reverse transcription	D	NA	Method of C _q determination	E	Materials & Methods
Storage conditions of cDNA	D	NA	Outlier identification and disposition	E	ND
qPCR target information			Results for NTCs	E	Materials & Methods
Gene symbol	E	Materials & Methods	Justification of number and choice of reference genes	E	NA
Sequence accession number	E	Materials & Methods	Description of normalization method	E	NA
Location of amplicon	D	Materials & Methods	Number and concordance of biological replicates	D	ND
Amplicon length	E	Materials & Methods	Number and stage (reverse transcription or qPCR) of technical replicates	E	
In silico specificity screen (BLAST, and so on)	E	Materials & Methods	Repeatability (intra-assay variation)	E	Table 3, Table S5
Pseudogenes, retropseudogenes, or other homologs?	D	NA	Reproducibility (inter-assay variation, CV)	D	Table 3, Table S6
Sequence alignment	D	ND	Power analysis	D	ND
Secondary structure analysis of amplicon	D	ND	Statistical methods for results significance	E	Materials & Methods
Location of each primer by exon or intron (if applicable)	E	NA	Software (source, version)	E	Materials & Methods

What splice variants are targeted?

E NA

Cq or raw data submission with RDML

D ND

NA= Not Applicable, ND= Not Determine