The absence of mRNAs reads corresponding to a specific member of a gene family does not necessarily imply that the gene is transcriptionally inactive, for example, the absence of mRNAs reads corresponding to a specific isoform may be due to insufficient read depth or reflect the absence of RNA synthesis. Alternatively, mRNAs reads may be due to non-specific binding of RNA synthesis machinery. Thus, the absence of mRNAs reads does not necessarily imply the absence of RNA synthesis or transcription. To address this issue, a more sensitive method for detecting non-specific binding is needed.