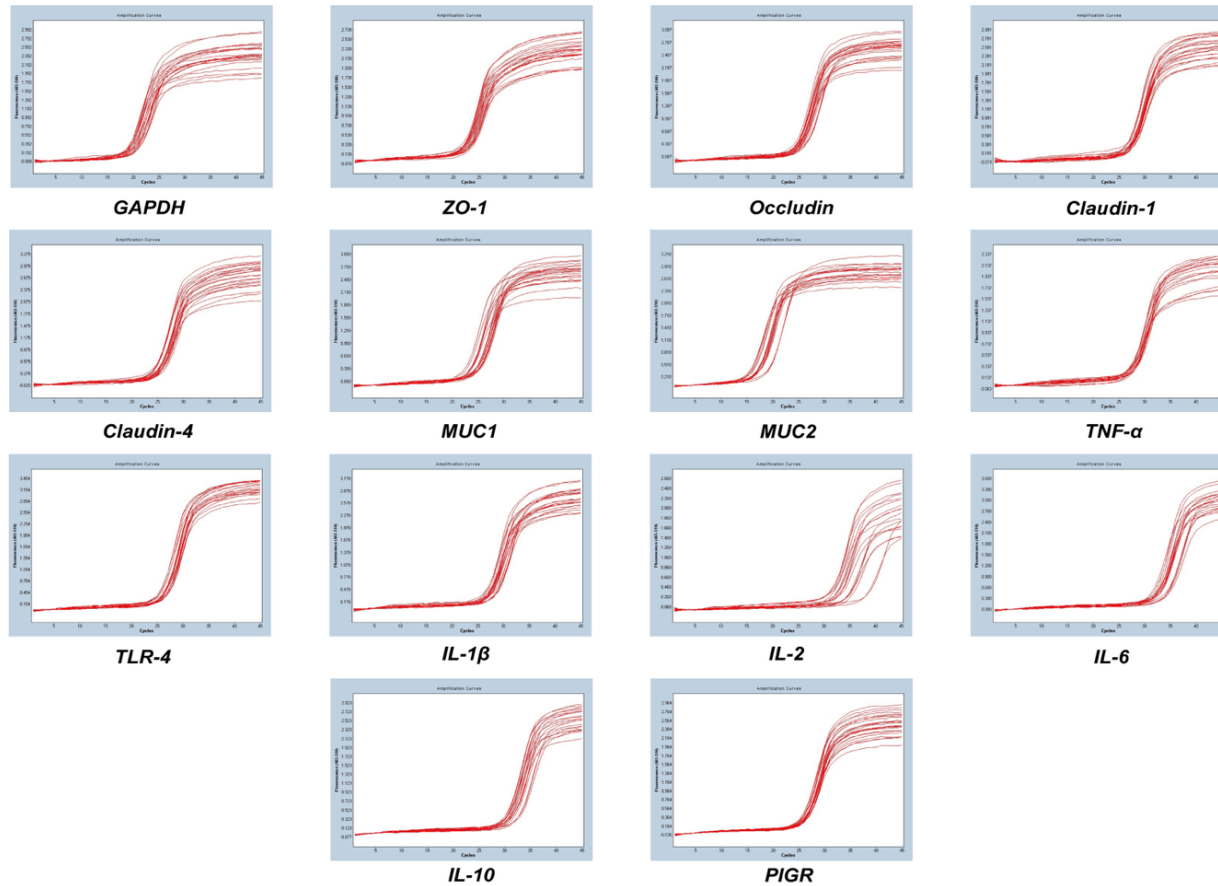


Amplification plot



Melt curve

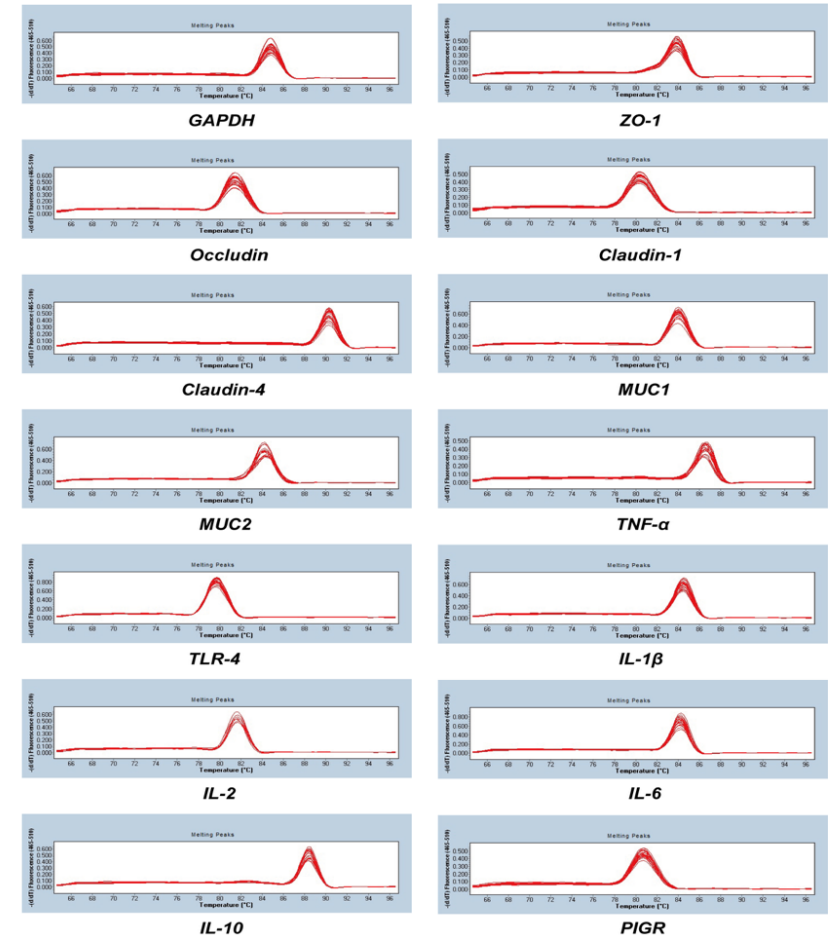


Fig. S1 Amplification and melting curves of qPCR analysis. The amplification curves show the real-time fluorescence signals of target genes across PCR cycles, and the cycle threshold (Ct) values were used for quantitative analysis. The melting curves were generated to verify the specificity of amplification products. A single peak in the melting curve indicates specific amplification without primer-dimer formation or non-specific products.