

# Full Panel RPP Real Time PCR Detection

Comprehensive Respiratory Diagnostic Detection in 8 PCR Reactions



<https://biomiga.com/product-category/infectious-disease-real-time-pcr-detection/>

## Key Features

### Validated for Rapid Turnaround

- CE-IVD certification
- USA: for research-use only
- Results in ≤60 minutes
- Validated in multiple CLIA-certified labs
- Compatible with QuantStudio, Bio-Rad & any other standard open platforms
- Free validation reagent
- Free CLIA/CAP validation support
- Validation plan available upon request

### Suitable Sample Types

- Oropharyngeal swabs /aspirates /washes
- Nasopharyngeal swabs /aspirates /washes
- Bronchoalveolar lavage/ tracheal aspirates /sputum

## ★ Product Characteristics

- Multiplex: 32 targets in one assay
- Sensitivity (LoD): 200 copies/mL
- Specificity: No cross-reactivity
- Dynamic Range: 10<sup>3</sup>–10<sup>8</sup> copies/mL
- Reproducibility: Consistent Ct across runs

### RESPIRATORY PATHOGEN COVERAGE (30 PATHOGENS)

■ Bacteria ■ Viruses



## Amplification Curves

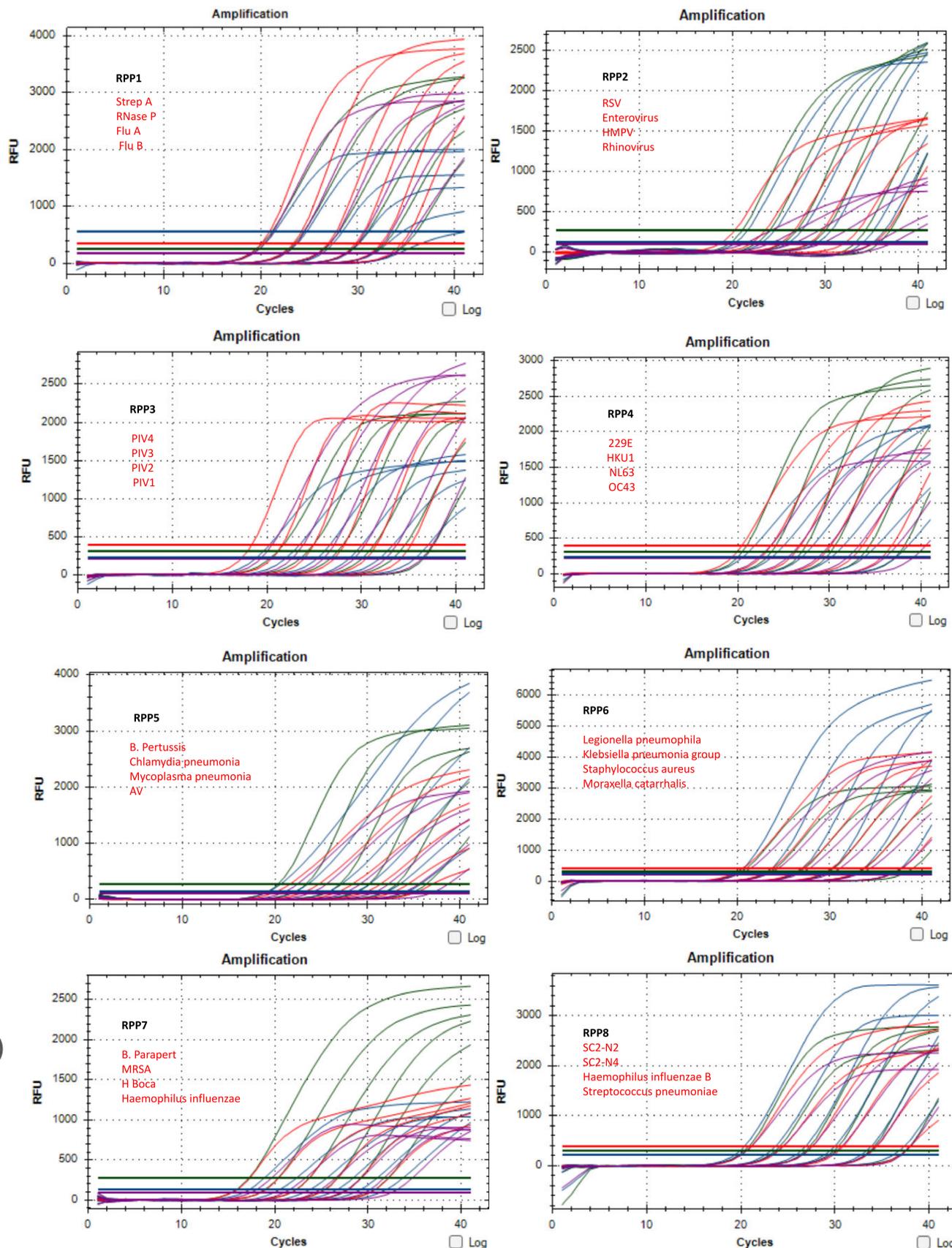


Figure 1. Limit of detection analysis of the RPP1 to RPP8. Serial dilutions from 10<sup>-5</sup> to 10<sup>-10</sup> demonstrate amplification across 4 fluorescence channels.

RPP Copies/T	RPP Copies/mL	Mean Ct value
10	10 <sup>3</sup>	36.88
100	10 <sup>4</sup>	33.39
10 <sup>3</sup>	10 <sup>5</sup>	29.85
10 <sup>4</sup>	10 <sup>6</sup>	26.60
10 <sup>5</sup>	10 <sup>7</sup>	23.36
10 <sup>6</sup>	10 <sup>8</sup>	20.21

### Key Highlights:

- **Sensitivity:** Reliable detection down to 10<sup>3</sup> copies/mL (Ct ~36.9).
- **Dynamic Range:** Broad, linear quantification across 10<sup>3</sup>–10<sup>8</sup> copies/mL.
- **Efficiency:** Consistent Ct decrease of ~3 cycles per 10-fold increase in template concentration.
- **Performance:** Demonstrates both high sensitivity and quantitative reliability of the RPP1–8 panel.

Table 1. RT-PCR analysis of 1,000 to 10,000,000 copies of inactivated respiratory viruses and bacteria using Biomiga's RPP1–8 Real-Time PCR Detection panel.