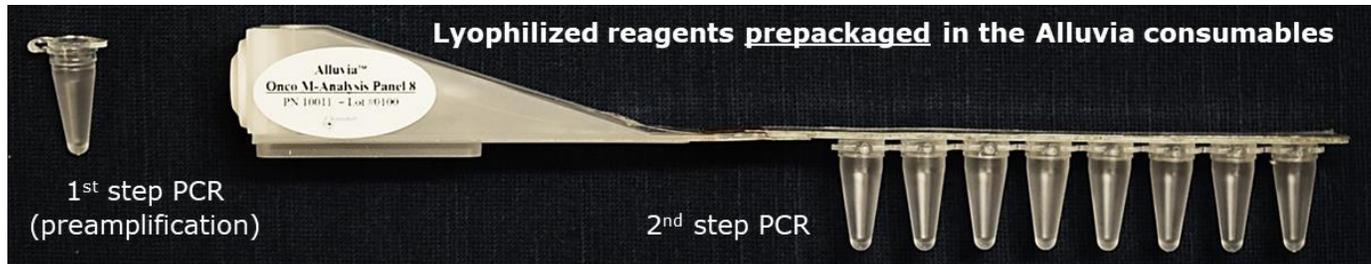


Prepackaged PCR Based Assays on the Alluvia Platform



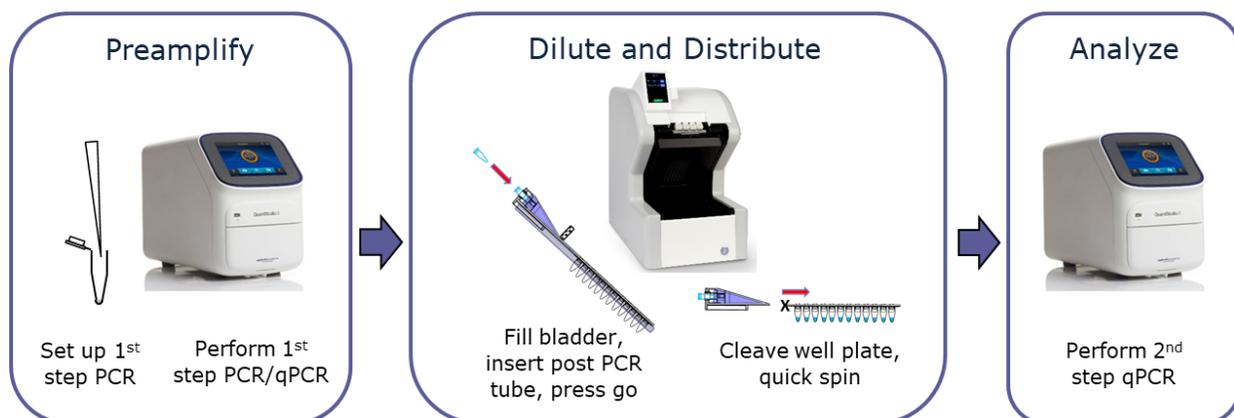
The Alluvia® consumable can be used as a vehicle for ready-to-use PCR assays, especially 2-step PCR assays. The system minimizes pipetting steps, provides continuous sample containment, and interfaces with standard instrumentation.

Methylation and Pathogen Detection Assays (see below):

- **Onco M-Analysis Panel 8**
- **Candida P-Detection Panel 8**

Features and Benefits:

- Utilize 2-step PCR (i.e. preamplification, multiplex-nested PCR):
 - Improve sensitivity and specificity,
 - Particularly beneficial for precious, complex, and difficult samples.
- Continuous containment to eliminate PCR product contamination.
- Prepackage PCR biochemistry (lyophilized primers, dNTPs, buffer, enzyme) in a consumable, which remains sealed throughout usage.
- Could be adapted to existing PCR assays.
- Interface with users existing laboratory equipment.
- Easy to use, reduces pipetting and associated errors, attractive form factor.

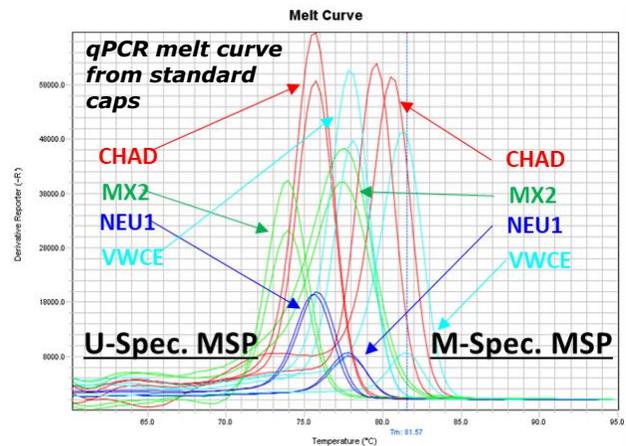
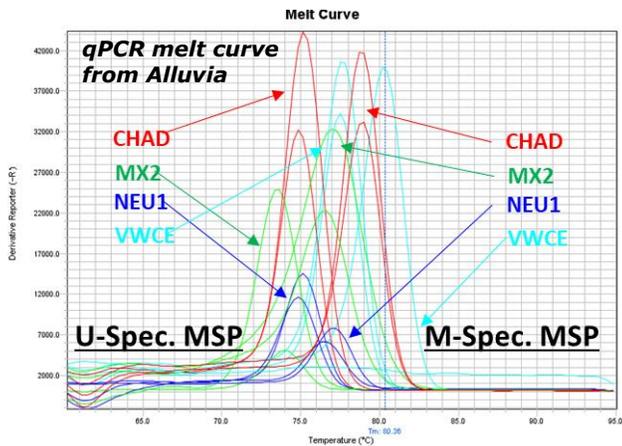


Onco M-Analysis Panel 8 DNA methylation status assay:

The **Onco M-Analysis Panel 8** is a 2-step MSP (Methylation Specific PCR) assay that can determine the methylation status at four genomic loci near the translational start site of the following cancer-related genes:

VWCE MX2 NEU1 CHAD

The assay is prepackaged by lyophilizing the primers, dNTPs, buffer, and Taq polymerase in both the preamplification (multiplex) PCR tube and the 2nd-step (nested) PCR tube strip before attachment to the Alluvia Plate Loading Manifold™ (PLM) consumable. The 2-step qPCR process used by the assay improves sensitivity an average of 30-fold and up to 300-fold compared to single-step qPCR (see www.kimantech.com – Applications – "1-Step vs 2-Step PCR for DNA Methylation Detection"). The data below demonstrate that the Alluvia System produces similar qPCR results as standard PCR tube strip caps but with all the benefits described above.

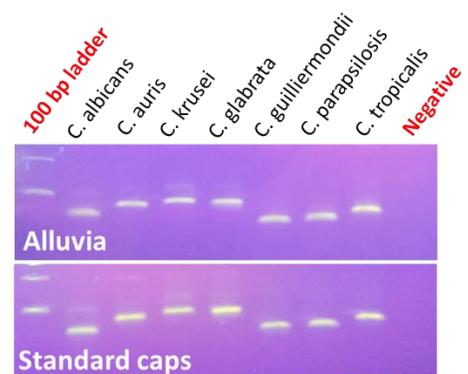
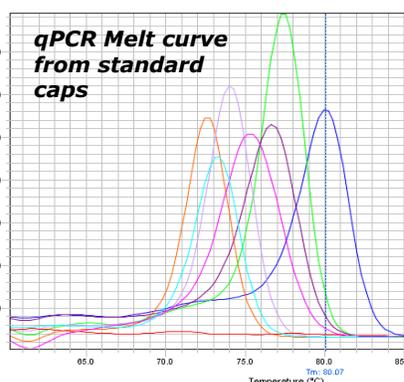
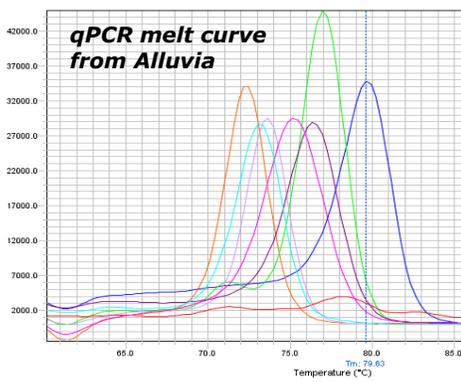


Candida P-Detection Panel 8 pathogen detection assay:

The **Candida P-Detection Panel 8** is a prepackaged multiplex-nested qPCR assay (targeting the 26S ribosomal RNA gene) that can detect and differentiate the following seven pathogenic species of the *Candida* genus of yeast:

C. albicans C. krusei C. guilliermondii C. parapsilosis
C. auris C. glabrata C. tropicalis

This 2-step qPCR process improves specificity compared to single-step qPCR (see www.kimantech.com – Applications – "1-Step vs 2-Step PCR for Pathogen DNA Detection from Whole Blood"). The data below demonstrate that the Alluvia System produces similar results as standard PCR tube strip caps but with all the benefits described above.



Alluvia® Assay Platform

Eliminate Carry-over Contamination Risk from Pre-amplified Samples