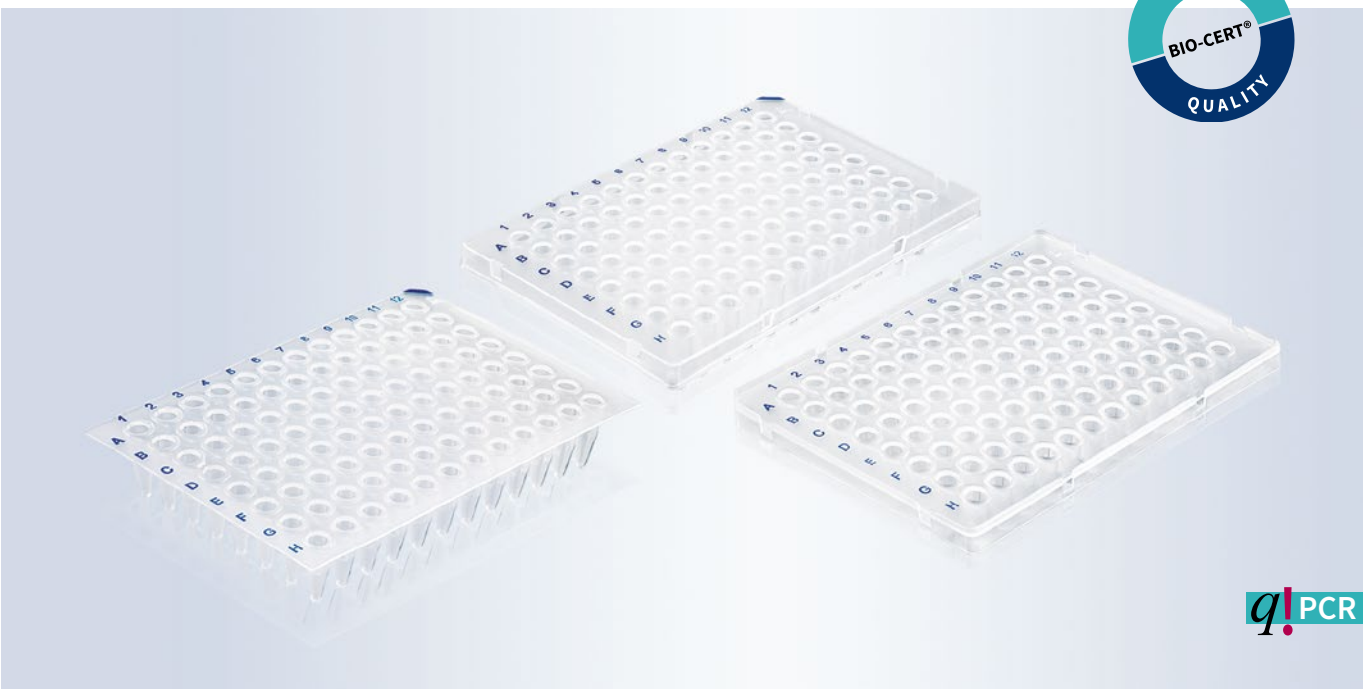
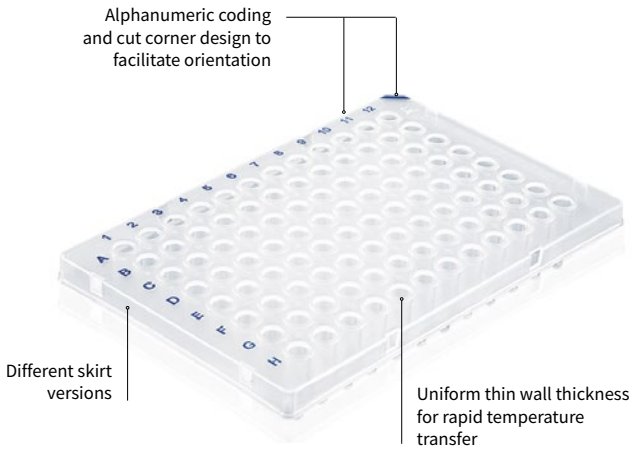
7.2 96-well PCR plates



- ✔ **Rapid heat transfer through thin vessel walls**
- ✔ **Suitable for all standard thermal cyclers**
- ✔ **Tightly sealable to protect against evaporation and contamination**

For medium and high sample throughput, 96-well plates from BRAND are the efficient solution for PCR and qPCR, and can be conveniently filled using multichannel pipettes or pipetting robots.
The uniform and thin wall thicknesses of the wells ensure rapid transfer of the temperature from the cycler to the sample, thus reducing cycle times.
A number of skirt choices ensures a good fit in common thermal cyclers for efficient heat transfer. For qPCR, white plates are available that optimally reflect the fluorescence signals.



Applications

+ Use for high throughput analyses
+ Use in automated process sequences
+ Method testing with 2D gradient PCR
+ PCR arrays

Features

+ Made of PP in low profile or standard profile
+ Available with different skirt options and in white or transparent
+ Elevated well rim available to prevent well to well contamination
+ Smooth interior surfaces for minimal interactions

User information

- To achieve accurate and consistent results throughout the entire plate, the plates must fit the cycler exactly. The plates must be tightly sealed to prevent evaporation.
- The right profile and skirt version must be selected depending on the cycler used.

Which plate is right for my application?

With the large number of plates and cyclers available on the market, it can be difficult to choose. However, you should primarily choose your plate based on the cycler you are using. The compatibility table provides an overview of tested combinations, which can help you quickly find the right plate for your cycler:

We advise against autoclaving PCR products. Autoclaving can be a source of contamination for disposable products.

Standard or low profile?

- Standard profile: These tubes fit into most classic thermocyclers, real-time PCR detection systems and sequencers.
- Low profile: The reduced air space above the PCR solution reduces evaporation. This ensures reaction conditions remain more constant during thermocycling than in standard profile tubes, particularly for low volumes of solution (≥ 20 µl). At the same time, these tubes also offer advantages in terms of light transmission during fluorescence assays, low volume, and fast PCR applications.

Semi-skirted and skirted PCR plates can be tagged with a barcode:

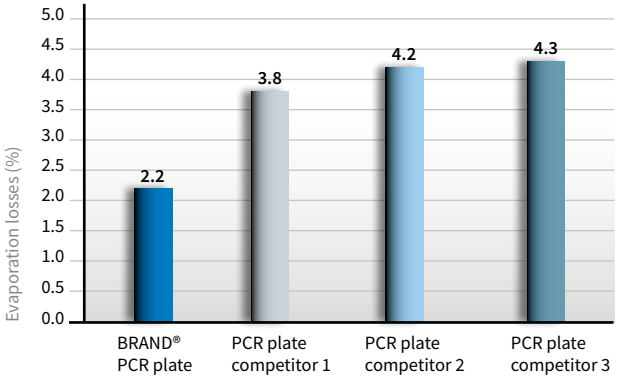
Application Note

Improved sealing surface of PCR plates from BRAND to support reliable evaporation protection

Author: BRAND GMBH + CO KG

The selection of proper material and surface finishing have an important influence on the sealing properties of PCR plates. It's not only important to select quality sealing films, but considering PCR plate design also can improve results for sample recovery during PCR. Design features such as a planar surface, and uniform plate and well thickness are essential for proper sealing and to the minimization of evaporative losses. In addition, the improved adhesion of sealing films support sample preservation. This technical note compares the attachment qualities of the Real-Time PCR sealing film (#781391) with corresponding PCR plates from several manufacturers and having different physical characteristics.

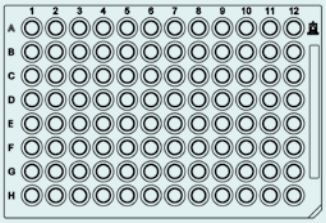
Evaporation losses of different PCR plates during PCR, sealed with adhesive sealing film:



Technical information & Ordering data

96-well plate, non-skirted

- Maximum variability in cycler selection
- Good plate stability thanks to a reinforced base plate
- Quick sample identification with alphanumeric codes in contrasting colors



96-well, non-skirted, low profile

Type	low profile	low profile
Well rim	not elevated	not elevated
Color	transparent	white
Volume [ml]	0.15	0.15
Cut corner	H12	H12
Pack of	50 pieces (5 plates per bag)	50 pieces (5 plates per bag)
Cat. No.	**781366**	**781367**

96-well, non-skirted, standard profile

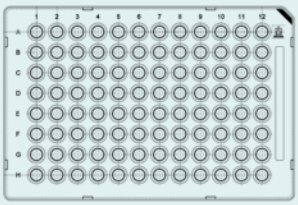
Type	standard	standard
Well rim	not elevated	not elevated
Color	transparent	white
Volume [ml]	0.2	0.2
Cut corner	A12	A12
Pack of	50 pieces (5 plates per bag)	50 pieces (5 plates per bag)
Cat. No.	**781368**	**781369**

96-well, non-skirted, standard profile, elevated rim

Type	standard	standard
Well rim	elevated	elevated
Color	transparent	white
Volume [ml]	0.2	0.2
Cut corner	H12	H12
Pack of	50 pieces (5 plates per bag)	50 pieces (5 plates per bag)
Cat. No.	**781350**	**781354**

96-well plates, semi-skirted

- Reliable sample identification with colored alphanumeric codes
- Semi-skirted plates are suitable for labeling or applying a bar code
- Optimized surface texture for reliable closure with self-adhesive sealing film



96-well, semi-skirted, low profile

Type	low profile	low profile
Well rim	not elevated	not elevated
Skirt	standard	standard
Color	transparent	white
Volume [ml]	0.15	0.15
Cut corner	A12	A12
Pack of	50 pieces (5 plates per bag)	50 pieces (5 plates per bag)
Cat. No.	781371	781372

Type	low profile	low profile
Well rim	not elevated	not elevated
Skirt	raised	raised
Color	transparent	white
Volume [ml]	0.15	0.15
Cut corner	A1	A1
Pack of	50 pieces (5 plates per bag)	50 pieces (5 plates per bag)
Cat. No.	781373	781374

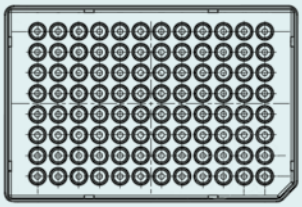
96-well, semi-skirted, standard profile

Type	standard	standard
Well rim	not elevated	not elevated
Skirt	standard	standard
Color	transparent	white
Volume [ml]	0.2	0.2
Cut corner	A12	A12
Pack of	50 pieces (5 plates per bag)	50 pieces (5 plates per bag)
Cat. No.	781375	781376

Type	standard	standard
Well rim	elevated	elevated
Skirt	standard	standard
Color	transparent	white
Volume [ml]	0.2	0.2
Cut corner	H12	H12
Pack of	50 pieces (5 plates per bag)	50 pieces (5 plates per bag)
Cat. No.	781400	781357

96-well plates, semi-skirted, for Roche LightCycler 480

- White PCR plate optimized for qPCR use in the Roche LightCycler 480
- Semi-skirted plates are suitable for labeling or applying a bar code

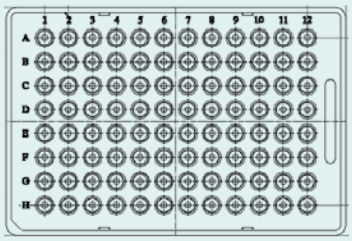


96-well, semi-skirted, low profile

Type	low profile	low profile
Color	white qPCR	white qPCR
Volume [ml]	0.15	0.15
Cut corner	H12	H12
Pack of	50 pieces (5 plates per bag)	50 pieces + 50 films for qPCR (781391)
Cat. No.	781364	781365

96-well plates, skirted

- Especially rigid for secure handling with robots and automated pipetting systems
- Available with bar code
- Optimized surface texture for reliable closure with self-adhesive sealing film



96-well, skirted, low profile

Type	low profile	low profile
Color	transparent	white
Volume [ml]	0.15	0.15
Cut corner	H1	H1
Pack of	50 pieces (10 plates per bag)	50 pieces (10 plates per bag)
Cat. No.	**781377**	**781378**

Cap strips can also be used for sealing purposes:
781413 (flat)
781414 (domed)

Application Note

Characterisation of antibodies with BRAND PCR plates

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As long as the laboratory has the correct primers available, colony PCR is a fast and established method to verify the gene of interest (GOI) within a colony-forming clone. Generally, it is sufficient to transfer a minimum number of cells from the colony into the PCR premix. However, these sensitive verification methods can be disrupted by low-quality PCR tubes and contamination by nucleic acids.

The application note “Characterization of antibodies with BRAND PCR plates” describes the use of this technique to identify clones that carry a desired GOI as an insert in the vector. Reactions occurred evenly throughout all of the wells of the BRAND 96-well PCR plate (#781375), allowing for unique identification of positive clones.

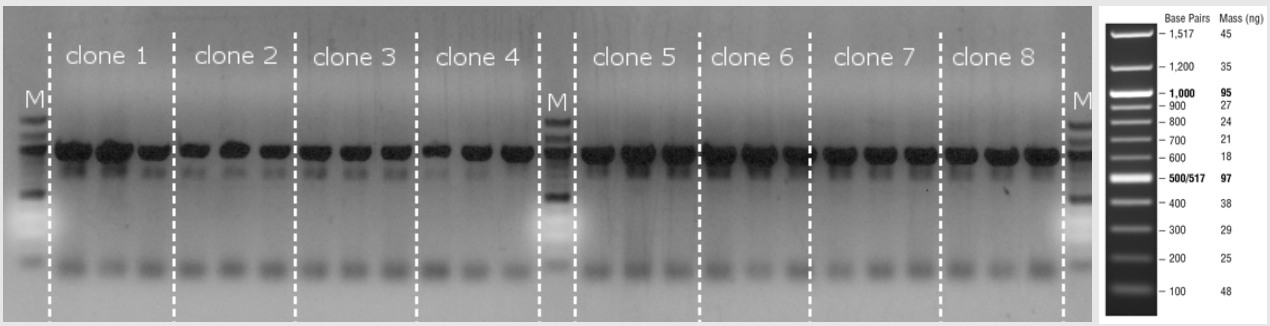

Image: Verification of the approx. 1kb insert in the vector of 8 transformed clones (E.coli).