Transparent-Bottom Cell Culture Plates

Transparent-bottom black-frame/white-frame cell culture plates have been widely used in the fields of cell biology research, drug development, and immunology research due to their excellent optical performance, reduced background interference and well-to-well crosstalk, as well as broad compatibility and application range.

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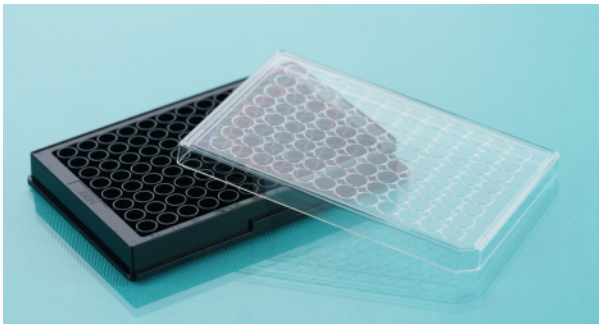
Transparent-Bottom Cell Culture Plates

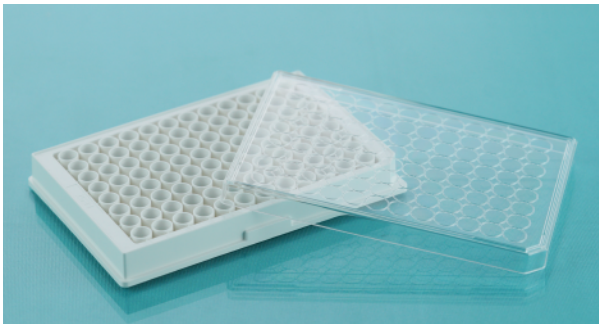
Product Features

- The plate bottom is securely welded and sealed to prevent leakage and cross-well contamination.
- The bottom is made of high-transparency PS material, with uniform thickness and flatness, ensuring no optical distortion under high-magnification microscopy. The well walls are made of light-blocking PS material to prevent inter-well interference.
- The absorbance CV value of an empty plate is no greater than 4%, ensuring minimal well-to-well variation and high reproducibility.
- The inner surface is TC-treated, providing excellent cell adhesion, making it suitable for adherent cell culture.
- Designed to conform to ANSI-SBS format dimensions.
- The side of the plate has a serrated design for easy handling; raised bumps on the bottom reduce noise during movement.
- The bottom is flat and clear, with encoded markings for each well for easy identification and observation.
- Free from pyrogens, endotoxins, and DNase/RNase contamination.
- Electron beam sterilized, SAL=10^{-6}.

Product Applications

In addition to conventional cell culture, transparent-bottom cell culture plates have the following applications:





Black-Frame Transparent Bottom：The black frame effectively absorbs stray light, reduces background fluorescence, and enhances signal-to-noise ratio and measurement accuracy.

- Fluorescence Microscopy Observation: Suitable for laser confocal microscopy, fluorescence in situ hybridization (FISH), etc.
- Fluorescence Detection Experiments: Including immunofluo rescence assays and quantitative analysis of intracellular fluorescence signals.
- Live Cell Imaging: The black frame minimizes background interference, allowing for better visualization of cell details and changes. It supports research on cell growth, proliferation, differentiation, and migration, providing clear images for live-cell imaging.

White-Frame Transparent Bottom:The white frame enhances luminescent signals by reflecting visible light and reducing chemiluminescence signal absorption.

- Luminescence Assays: Such as chemiluminescence immunoassays and bioluminescent reporter gene assays.
- Enzyme-Linked Immunosorbent Assays (ELISA): Used with microplate readers for detecting colorimetric or luminescent signals in immunoassays.
- Cell Growth and Metabolism Detection: Evaluates cell growth, activity, and metabolic levels by detecting luminescent substances produced during cellular metabolism, such as ATP. This application is crucial in cell biology research and drug toxicity testing.

Product information

Well Number	Cell Growth Area（cm^2）	Recommended Medium Volume（mL）	Bottom Type	Colour	Packaging	/Pack	/Case	Cat. No. TC Treated
96 Well Clear PS Bottom	0.32	0.1-0.2	⊔	White, transparent bottom	Individually Packaged	1	30	701701
				Black, transparent bottom	Individually Packaged	1	30	701401

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