

Cyclo-olefin microplates

APPLICATION-BASED MICROPLATES

Cellular Assays

Most applications require a disposable microplate with good growth surface, preferably not glass, and good optical properties for imaging.

Cyclo-olefin microplates offer specific features to enhance cellular assays:

- Flat bottom provides uniform surface for adherence and growth.
- Low birefringence enables microscopic interrogation of cellular events.
- Surface treatment, RF-gas plasma treatment for surface attachment with adherent cell lines.
- Small-volume container allows the user to perform cellular assays with as little as 1000 cells/well.
- Round wells prevent cell “wicking” or “clumping” into well corners.

Biochemical Assays

Require the lowest possible background to achieve maximum signal-to-noise ratio, chemical inertness and low variability due to evaporation while working with minimal volumes.

Cyclo-olefin microplates offer specific features to enhance biochemical assays:

- Low native auto-fluorescence enables very sensitive fluorescence assays to be performed.
- Perimeter wells prevent evaporation within the wells around plate edge, giving more uniform data sets.
- Small well volumes help to reduce amount of reagent, rare proteins or enzymes required.
- Reduced surface energy provides significantly low non-specific binding.
- High light transmittance. Clear optical window from 230 nm to the near IR.

Compound Storage

Microplates must be suitable for use in automated systems, solvent resistant and help to avoid compound evaporation during storage to maintain library integrity.

Cyclo-olefin microplates offer specific features for compound storage:

- Broad chemical resistance, especially to DMSO and alcohol, allows for storage of compound concentrates.
- Mechanical stability, with a hardness of 2.2GPa to resist curvature or deformation caused by robotic handling.
- Clear plates available to enable easy viewing of chemical in solution.
- Low evaporation lids provide a snug fit to dramatically reduce sample loss caused by evaporation.
- Pre-labelled bar codes. Labels are chemical and temperature resistant and are provided in sequence.

Proteomic Applications, Protein-Protein Interactions

Protein applications require minimum non-specific surface interaction combined with ideal optical properties for quantitative detection.

Cyclo-olefin microplates offer specific features for proteomic applications:

- Reduced surface energy provides significantly low non-specific protein binding due to hydrophobic surface properties.
- High light transmittance offers a clear optical window from 230nm to the near IR.
- Low well volumes help to conserve expensive reagent or rare proteins/enzymes.
- Perimeter wells prevent evaporation from wells around the plate edge giving a more uniform data sets.
- Mechanical stability, with a hardness of 2.2GPa, to resist curvature or deformation caused by robotic handling.



FluidX reserve the right to update and change product information without notice.

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