

SIGMAScreen™ Poly-D-Lysine Coated Plates

Unrivaled consistency and binding capacity for your cell-based assays

Sigma knows your cell-based assays demand maximum cell attachment, cell survival and cell differentiation. That's why we build superior binding capacity and well-to-well coating uniformity into our Poly-D-Lysine coated plates.

The SIGMAScreen Poly-D-Lysine product range of 96- and 384-well coated plates, available in a variety of colors for different assay detection formats and minimal crosstalk, has been optimized for high throughput screening. Developed to meet proposed Society of Biomolecular Screening microplate specifications,* SIGMAScreen Poly-D-Lysine Coated Plates excel in applications such as calcium flux assays, cell proliferation, gene reporter and apoptosis assays as well as cell adhesion kinetic studies. And are ideal for culture of transfected cell lines, primary neurons, glial cells and fibroblasts.

- **60% more cell attachment capabilities with serum-free media!**

Whether your cells are cultured with serum or in serum-free media SIGMA's Poly-D-Lysine Coated Plates offer up to 60% more binding over standard tissue culture treated plates or the leading competitor's PDL coated plates.

- **Compatible with all common cell types**

Neuronal, Primary neurons and transfected lines such as HEK 293, BHK and L929. For additional cell lines visit sigma-aldrich.com/hts.

- **Consistent quality and testing**

Proprietary coating process manufactured under ISO9002 in our GMP facility delivers high well-to-well and plate-to-plate consistency making SIGMAScreen Coated Plates the new standard in high throughput screening.

Each lot of Poly-D Lysine coated plates has been tested for cell attachment performance in serum free media using BHK-21 adherent cell. Each lot is also tested for endotoxins, bacteria and fungi.

- **Flexibility in your assay detection**

Offering a variety 96- and 384-well Corning® base plates designed and validated with all commercial microplate readers and robotic systems in compliance with proposed Society of Biomolecular Screening microplate specifications.*

- **Stable at cooler or room temperatures for added storage convenience**

- **Custom options**

Special requirements? No problem. Sigma also offers custom coating and packaging options manufactured under our same high-quality ISO9002, GMP facility guidelines. For additional information on our custom capabilities contact us at hts@sial.com and let us know your interests.

* For additional information on SBS microplate standards visit sbsonline.org

availability, ordering & tracking

sigma-aldrich.com

scientific tools, products & information



SIGMAScreen™ Poly-D-Lysine Coated Plates

60% more cell attachment capacity

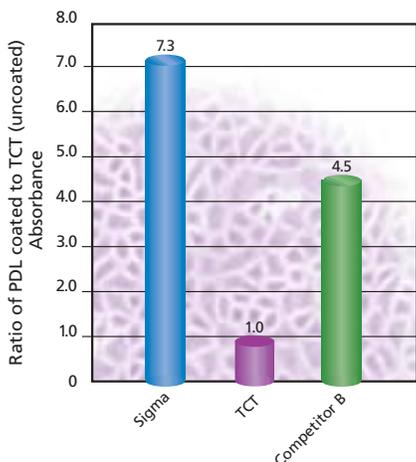


Figure 1: BHK-21 cells (1×10^5 cells/well) were incubated in clear 384-well plates for 1 hour (37 °C, 5% CO₂) in DMEM F-12 Media (D 6421). After washing 3 times with 80 µl/well HBSS (H 6648), cell attachment was quantitated by total protein measurement with Bradford reagent (B 6919) following detergent lysis. Detection analysis was performed using The Perkin Elmer HTS 7000.

Stability at cooler and room temperatures

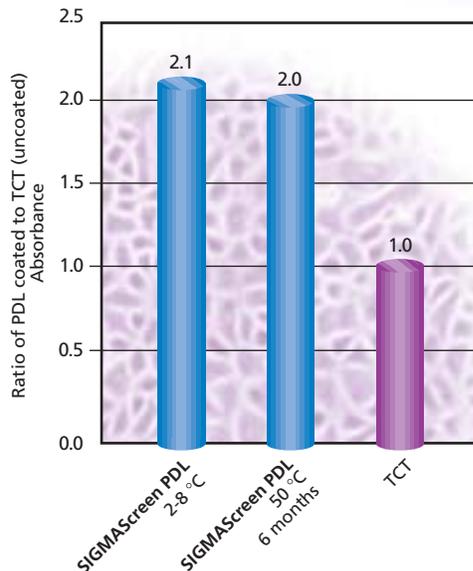


Figure 3: Black/clear bottom 96-well PDL coated plates were incubated at either 50 °C for 6 months or at 2-8 °C for 11 months. HEK 293 cells at 3.0×10^5 cells/ml were incubated for 1 hour in 100 µl/well of DMEM F-12 media (D 6421) in 8 wells/plate of 96-well plates. The plates were washed three times with HBSS (H 6648) and the amount of cell attachment was quantitated by measurement of total protein by Bradford (B 6919) after lysis. Plates were read in a Wallac Victor plate reader at 620 nm.

Greater well-to-well coating consistency

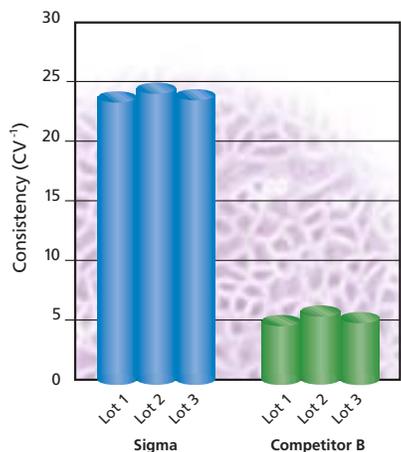


Figure 2: Clear/clear bottom 96-well PDL coated plates from 3 separate lots were analyzed for PDL coating/well. PDL coating was covalently modified with biotin and the amount of biotinylated PDL/well was measured with streptavidin-peroxidase and ABTS substrate (A 9941). Results show that SIGMA-Screen PDL plates have an average of 5 times greater consistency vs. Competitor B's PDL plates.

Product Specifications

Specification	96-Well Coated Plates	384-Well Coated Plates
Plate composition	polystyrene	polystyrene
Well configuration	Flat	Flat
Well diameter	6.35 mm	3.63 mm ²
Well depth	10.67 mm	10.67 mm
Growth area	0.32 cm ²	266 mm ²
Lid	Yes	Yes

Ordering Information

Product Code	Description	Pack Size
S 7686	SIGMAScreen Poly-D-Lysine Coated Plates, 384-well, black	5 plates
		100 plates
M 5307	SIGMAScreen Poly-D-Lysine Coated Plates, 96-well, black	5 plates
		100 plates
S 7436	SIGMAScreen Poly-D-Lysine Coated Plates, 384-well, clear	5 plates
		100 plates
M 3555	SIGMAScreen Poly-D-Lysine Coated Plates, 96-well, clear	5 plates
		100 plates
S 7561	SIGMAScreen Poly-D-Lysine Coated Plates, 384-well, white	5 plates
		100 plates
M 5682	SIGMAScreen Poly-D-Lysine Coated Plates, 96-well, white	5 plates
		100 plates

All plate formats are clear bottom and include lids.

For further information on our growing line of HTS products, visit us at sigma-aldrich.com/hts

To Order Call: 1-800-325-3010

Technical Service: 1-800-325-5832

