

Coated Plate Selection Guide by Cell Type

The biological cell attachment matrix such as collagen, fibronectin or vitronectin, strongly binds to mammalian cell membrane spanning receptors, and mediates living mammalian cells adhering to the bottom of wells of a polystyrene tissue culture plate, similar to the solid phase of a typical ELISA, in which an antigen is adsorbed to the bottom of wells of a high-bound ELISA plate. Meanwhile, cells growth in the biological cell attachment matrix-coated plates will not alter the cellular morphology and biological characters. Thus, the coated plates allow to detect cell surface and/or cytoplasmic antigens on or in intact living cells (living cell ELISA), cellular function assays, such as cellular metabolism, adhesion, cytotoxicity, migration, proliferation, differentiation, ion channel flux and report genes, as well as for pharmaceutical drug cytotoxicity, functionality and metabolism assays with a monolayer of intact living cells

Protein Coat Plate	Collagen I	Fibronectin	Vitronectin	Laminin	Poly D- or L-Lysine
Cell Type					
HEK-293	Yes	Yes	Yes		Yes
CHO	Yes		Yes		Yes
Vero		Yes	Yes		Yes
BHK		Yes	Yes		Yes
COS-7					Yes
Primary cells		Yes	Yes	Yes	Yes
HEPG2	Yes				

Coated Plate Selection Guide by Cell-Based Assay

Bio-Coat_Plate	Collagen I	Fibronectin	Vitronectin	Gelatin	Laminin	Collagen I /Fibronectin	Fibronectin /Vitronectin	Fibronectin/ Laminin	Poly D- or L-Lysine
Assay Type									
Cell Surface ELISA	Yes	Yes	Yes			Yes	Yes	Yes	
Cell adhesion	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cell cytotoxicity	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cell proliferation	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cell differentiation	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes
Cell migration		Yes				Yes	Yes	Yes	
Ion channel/Calcium flux (FLIPR)	Yes					Yes			Yes
Reporter gene	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes
Neurite outgrowth	Yes				Yes	Yes		Yes	
GPCR (Active/Inactive)	Yes					Yes			Yes