

CytoSelect Cell Proliferation Assay Reagent (Colorimetric) Accessory Reagent

CytoSelect Cell Proliferation Assay Reagent (Colorimetric)

CATALOG #
AAA44612

PRODUCT SYNONYMS

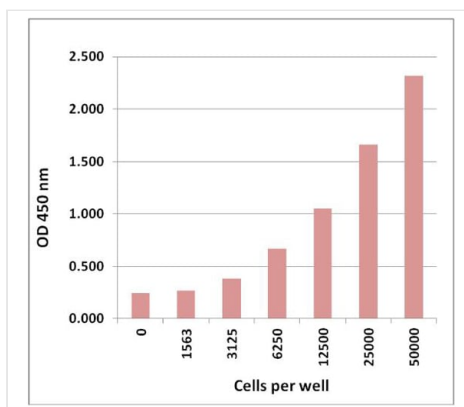
CytoSelect Cell Proliferation Assay Reagent (Colorimetric); CytoSelect Cell Proliferation Assay Reagent (Colorimetric) accessory reagent

PRODUCT SPECIFICATIONS

Preparation and Storage

CytoSelect WST-1 Cell Proliferation Assay Reagent is a clear, slightly red, ready-to-use solution and should be stored at 4 degree C. If precipitates or turbidity are observed upon thawing, warm the solution to 37 degree C for 5-10 minutes and agitate to dissolve the precipitates. For longer periods, aliquot and store at -20 degree C protected from light to avoid repeated freeze-thaw cycles.

IMAGES



Application Data



Application Data

ADDITIONAL INFORMATION

Related Product Information for CytoSelect Cell Proliferation Assay Reagent (Colorimetric) accessory reagent	Principle of the assay: CytoSelect WST-1 Cell Proliferation Assay Reagent provides a colorimetric format for measuring and monitoring cell proliferation. The 10 mL volume is sufficient for the evaluation of 960 assays in ten 96-well plates or 192 assays in eight 24-well plates. Cells can be plated and then treated with compounds or agents that affect proliferation. Cells are then detected with the proliferation reagent, which is converted in live cells from WST-1 to the formazan form in the presence of cellular NADH and an electron mediator. An increase in cell proliferation is accompanied by increased signal, while a decrease in cell proliferation (and signal) can indicate the toxic effects of compounds or suboptimal culture conditions. The assay principles are basic and can be applied to most eukaryotic cell lines, including adherent and non-adherent cells and certain tissues. This cell proliferation reagent can be used to detect proliferation in bacteria, yeast, fungi, protozoa as well as cultured mammalian and piscine cells. Background: The measurement and monitoring of cell proliferation is an essential technique in any laboratory focused on cell-based research. This skill allows for the optimization of cell culture conditions as well as the determination of cytokine, growth factor, or hormone activity. More importantly, the cytostatic nature of anticancer compounds in toxicology testing, the efficacy of therapeutic chemicals in drug screening, and cell-mediated cytotoxicity can all be assessed through the quantification and monitoring of cell proliferation. Cell proliferation characteristics include cellular metabolic activity and cell membrane integrity. One method for measuring metabolic activity is to incubate the cells with a tetrazolium salt such as MTT, which is cleaved into a colored formazan product by metabolically active cells. Similarly, the green fluorescent dye Calcein AM can measure intracellular esterase activity in proliferating live cells, which is another indicator of cell viability.
Product Categories/Family for CytoSelect Cell Proliferation Assay Reagent (Colorimetric) accessory reagent	Cell Based Assays; Cell Health Assays > Cell Proliferation Assays
References	1. Jacobsen MD, Weil M, Raff MC. (1996) J Cell Biol 133, 1041. 2. Papadopoulos NG, Dedoussis GV, Spanakos G, Gritzapis AD, Baxevanis CN, Papamichail M. (1994) J Immunol Methods 177, 101. 3. Poole CA, Brookes NH, Clover GM. (1993) J Cell Sci 106, 685. 4. Wang XM, Terasaki PI, Rankin GW Jr, Chia D, Zhong HP, Hardy S. (1993) Hum Immunol 37, 264. 5. Weil M, Jacobson MD, Coles HS, Davies TJ, Gardner RL, Raff KD, Raff MC. (1996) J Cell Biol 133, 1053. 6. Zurgil N, Shafran Y, Fixler D, Deutsch M. (2002) Biochem Biophys Res Commun 290, 1573.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.