EZClick™ Protein Synthesis Monitoring Assay Kits

Cells generate a complete set of proteins during cell division. Protein synthesis is essential in cell growth, proliferation, signaling, differentiation or death. Methods enabling detection and characterization of nascent proteins, or changes in protein expression/degradation during disease, drug treatments or environmental changes are vital in cytotoxicity studies. BioVision's **EZClick™ Protein Synthesis Monitoring Assay Kits** can be used in different platforms by utilizing a novel and robust method based on an analog of puromycin, O-Propargyl-puromycin (OP-puro). OP-puro does not require methionine-free conditions and can be used to label nascent proteins directly in the cell culture. Our kits are simple, non-radioactive, sensitive, and can be used using a fluorescence microscope or a flow cytometry.

Key Features:

- **Non-radioactive, versatile assays** (Flow cytometry and Fluorescence Microscopy)
- **Specific,** homogeneous assay
- **Sensitive:** fluorometric format
- **Convenient:** minimal sample preparation, fast protocols (< 2 hours)
- **Cost effective:** 50 assays; High Throughput Screening (HTS) compatible
- **Adaptable:** works with most of the commonly available instrumentations

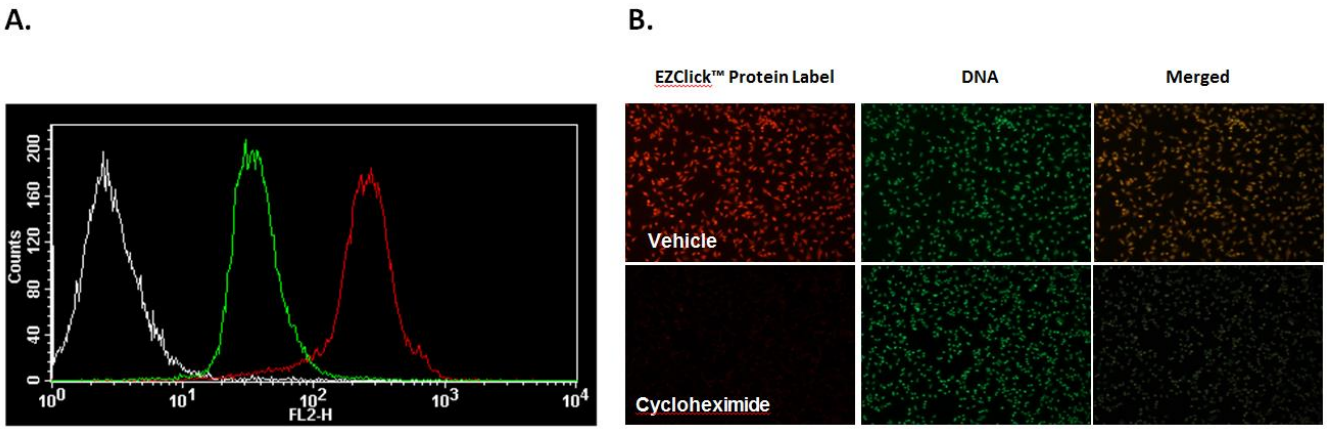

Figure. **A**. **Analysis of protein biosynthesis in presence of Cycloheximide.** Jurkat cells were pre-incubated (vehicle vs. 1X Cycloheximide, for 30 minutes at 37°C). Cells were then incubated either with culture medium (white), 1X EZClick™ Protein Label (Red) or 1X Cycloheximide (Green) for 30 minutes. Protein synthesis was detected by Flow Cytometry (FL-2). Data shows the inhibitory effect of Cycloheximide on nascent polypeptides synthesis. **B. Analysis of protein biosynthesis in presence of Cycloheximide.** HeLa cells were pre-incubated (vehicle vs. 1X Cycloheximide; 30 minutes at 37°C). Cells were then incubated in culture medium containing 1X EZClick™ Protein Label without or with 1X Cycloheximide. Protein synthesis was detected by Fluorescence Microscopy. Reduced red fluorescence in Cycloheximide shows its inhibitory effect on translation of mRNA to nascent polypeptides. Nuclear staining in both panels confirms that red fluorescence is the result of EZClick™ Protein Label incorporation.

Check out BioVision's kits evaluating cell proliferation, cell cytotoxicity & cell viability !

Product Name	Catalog	Size
EZClick™ EdU DNA Synthesis Monitoring Kit (FC)	**K946**	50 assays
EZClick™ EdU DNA Synthesis Monitoring Kit (M)	**K947**	50 assays
BrdU Cell Proliferation Assay Kit	**K306**	200 ,1000 assays
Cell Proliferation Assay Kit (F)	**K307**	1000 assays
EZClick™ Protein Synthesis Monitoring Assay Kit (FC)	**K715**	50 assays
EZClick™ Protein Synthesis Monitoring Assay Kit (M)	**K714**	100 assays
EZViable™ Calcein AM Cell Viability Assay Kit (F)	**K305**	1000 assays
MTS Cell Proliferation (C) Assay Kit	**K300**	500 , 2500 assays
MTT Cell Proliferation Assay Kit (C)	**K299**	1000 assays
Neutral Red Cell Cytotoxicity Assay Kit	**K447**	1000 assays
Quick Cell Proliferation (C) Assay Kit	**K301**	500 , 2500 assays
Quick Cell Proliferation (C) Assay Kit Plus	**K302**	500 , 2500 assays
Ready-to-use Cell Proliferation (C) Reagent, WST-1	**K304**	2500 assays
VisionBlue™ Quick Cell Viability (F) Assay kit	**K303**	500 , 2500 assays
Adenylate Kinase (AK) Activity Assay Kit (C/F)	**K350**	100 assays
Cell-Mediated Cytotoxicity (F) Assay Kit (7-AAD/CFSE)	**K315**	100 assays
LDH-Cytotoxicity (C) Assay Kit	**K311**	400 assays
LDH-Cytotoxicity (C) Assay Kit II	**K313**	500 assays
PicoProbe™ LDH-Cytotoxicity (F) Assay Kit	**K314**	500 assays
Live-Dead Cell Staining Kit	**K501**	100 assays
Live/Dead Cell Viability Assay Kit(for Mammalian Cells)	**K502**	100 assays