

Absorbance, Excitation and Emission Information for Fluorescent and Spectrophotometric Assays

Fluorescent and Spectrophotometric Assays.

These are the recommended wavelengths for use of these products. The recommended wavelengths may differ from the wavelengths that will give the maximum absorbance, excitation and/or emission.

Product (Compound)	Absorbance	Excitation/ Emission
Apo-ONE® System (rhodamine 110)	—	485nm/530nm
AttoPhos® System (2'-[2-benzothiazoyl]-6'-hydroxybenzothiazole; BBT)	—	435nm/555nm
β-Galactosidase Enzyme Assay System (o-nitrophenol)	420nm	—
CaspACE™ Assay System, Colorimetric (p-nitroaniline; pNA)	405nm	—
CaspACE™ Assay System, Fluorometric (7-amino-4-methyl coumarin; AMC)	—	360nm/460nm
CellTiter 96® Assay (MTT formazan product)	570nm	—
CellTiter 96® AQ _{ueous} Assay (MTS formazan product)	490nm	—
CellTiter 96® AQ _{ueous} One Solution Assay (MTS formazan product)	490nm	—
CellTiter-Blue® Assay (resorufin)	570nm (1)	560nm/590nm
ChipShot™ Labeling and Clean-up System		
• Cy®3	550nm	550nm/570nm
• Cy®5	650nm	650nm/670nm
CytoTox 96® Assay (formazan product)	490nm	—
CytoTox-Fluor™ Assay	—	485nm/520nm
CytoTox-ONE™ Assay (resorufin)	570nm (1)	560nm/590nm
DAPI (nucleic acid stain)	—	360nm/460nm
DeadEnd™ Fluorometric TUNEL System (fluorescein)	—	494nm/520nm
E _{max} ® ImmunoAssay Systems (3,3',5,5'-tetramethylbenzidine; TMB)	450nm	—
FluoroTect™ Green _{ys} tRNA (BODIPY®-FL)	—	502nm/510nm
Griess Reagent (azo compound)	520–550nm	—
HaloTag® diAcFAM Ligand (after hydrolysis)	—	494nm/562nm
HaloTag® TMR Ligand	—	555nm/585nm
HaloTag® Coumarin Ligand	—	353nm/442nm
Hemoglobin (present in rabbit reticulocyte lysates)	300–600nm	—
Monster Green® Fluorescent Protein (hMGFP)	—	480nm/540nm
MultiTox-Fluor Assay	—	400nm/505nm and 485nm/520nm
Nucleic acids	260nm	—
PepTag® peptides	570nm	540nm/592nm
Phosphatase assay (molybdate dye)	600nm or 630nm	—
Polysaccharides (potential contaminant in DNA preparations)	230nm	—
PowerPlex® Systems		
• 6-carboxy-4',5'-dichloro-2',7'-dimethoxy-fluorescein (JOE)	—	520nm/548nm
• carboxy-tetramethylrhodamine (TMR)	—	550nm/573nm
• carboxy-X-rhodamine (CXR)	—	578nm/604nm
• fluorescein (FL)	—	494nm/520nm
ProFluor® Assays		
• rhodamine 110 (R110)	—	485nm/530nm
• 7-amino-4-methyl-coumarin (AMC)	—	355nm/460nm
Propidium iodide (nucleic acid stain)	—	540nm/620nm
Protein	280nm	—

(1) Resorufin levels can be quantitated spectrophotometrically at 570nm, but measuring fluorescence is recommended due to the increased sensitivity. See the *CellTiter-Blue® Cell Viability Assay Technical Bulletin #TB317* or the *CytoTox-ONE™ Homogeneous Membrane Integrity Assay Technical Bulletin #TB306* for more information.