

Product Datasheet

PiColorLock Gold Colorimetric Assay Kit 303-0030

Unit Size: 1 x 625/1560 Tests

Store at 4C. Do not freeze.

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303-0030**PiColorLock Gold Colorimetric Assay Kit****Product Information**

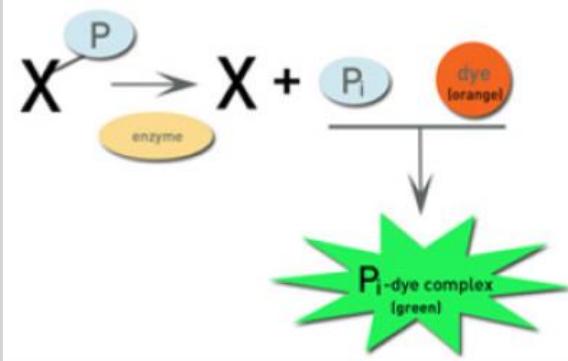
Unit Size	1 x 625/1560 Tests
Concentration	Concentration is not relevant for this product. Please see the protocols for proper use of this product.
Storage	Store at 4C. Do not freeze.
Buffer	Colorlock 635/1560 assays reagent is supplied with a phosphate standard solution.

Product Description

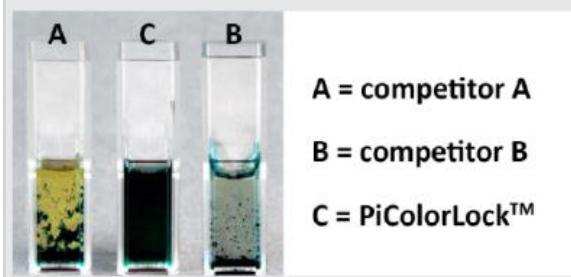
Description	PiColorLock™ phosphate detection reagent changes colour in the presence of inorganic phosphate (Pi). This can be exploited to measure any enzyme that generates Pi including ATPases, GTPases, phosphatases, heat-shock proteins and DNA unwinding proteins. The unique formulation of PiColorLock affords enhanced assay linearity, dynamic range and colour stability; it is also possible with PiColorLock to work with unstable substrates (e.g. ATP, GTP) that give high non-enzymatic background signals with other acidic dye-based detection reagents. Key Features: Colorimetric Assay - competitor assays are radioactive. Special additive ensures low backgrounds with acid labile substrates. Unparalleled stability of phosphate-dye complexes. Reagent is compatible with almost any assay buffer. No inhibition of color development by high concentrations of protein. Stable reagent formulation - long shelf life.
Notes	PiColorlock® is a registered trademark of Innova Biosciences.

Images

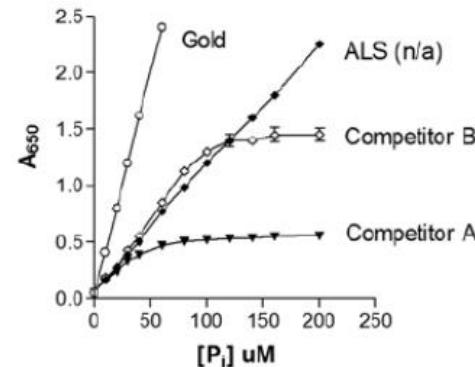
PiColorlock Gold Colorimetric Assay Kit [303-0030] - Universal assay for inorganic phosphate. Phosphorylated substrate (X-P) is acted on by an enzyme releasing X and inorganic phosphate. The reaction is halted by the addition of an acidified dye reagent (orange), which turns green or yellow in the presence or absence of inorganic phosphate.



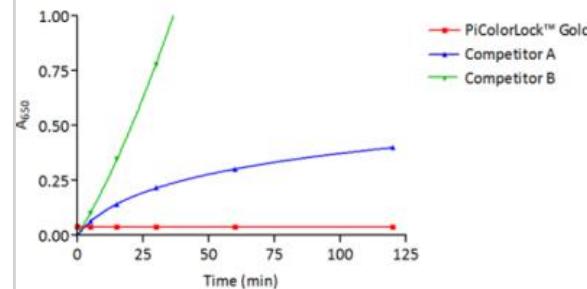
PiColorlock Gold Colorimetric Assay Kit [303-0030] - Most detection reagents form very unstable dye complexes and samples need to be read promptly. In cuvette assays there can be a total loss of signal if a precipitate forms and settles. In plate assays, the data become extremely erratic when clumps of material form in the light path. PiColorlock complexes are stable for many hours, which allows multiple assay plates or cuvettes to be conveniently set up as a batch and read later using plate stackers or other automated equipment.



PiColorlock Gold Colorimetric Assay Kit [303-0030] - For the purposes of comparison, data for PiColorlock ALS reagent (no longer available) is also shown, as it provides similar absorbance values to competitor products, at least at low levels of inorganic phosphate. Competitors' products are linear over a much narrower range of concentrations. PiColorlock ALS reagent has now been superseded by PiColorlock Gold, which gives higher OD values.



PiColorlock Gold Colorimetric Assay Kit [303-0030] - Shows the effect of incubating ATP (without any added enzyme) with three commercial dye-based detection reagents.



Publications

Choi K, Batke S, Szakal B et al. Concerted and differential actions of two enzymatic domains underlie Rad5 contributions to DNA damage tolerance. *Nucleic Acids Res* 2015 [PMID: 25690888]

Arnold LH, Kunzelmann S, Webb MR, Taylor IA. A continuous enzyme-coupled assay for triphosphohydrolase activity of HIV-1 restriction factor SAMHD1. *Antimicrob Agents Chemother*. 2014 [PMID: 25331707]

Humnabadkar V, Madhavapeddi P, Basavarajappa H et al. Assays, Surrogates, and Alternative Technologies for a TB Lead Identification Program Targeting DNA Gyrase ATPase. *J Biomol Screen* 2014 [PMID: 25300873]

Menard R, Schoenhofen IC, Tao L et al. Small-molecule inhibitors of the pseudaminic acid biosynthetic pathway: targeting motility as a key bacterial virulence factor. *Antimicrob Agents Chemother*. 2014 [PMID: 25267679]

Sarraf NS, Shi R, McDonald L et al. Structure of CbpA J-Domain Bound to the Regulatory Protein CbpM Explains Its Specificity and Suggests Evolutionary Link between CbpM and Transcriptional Regulators. *PLoS One* 2014 [PMID: 24945826]

Zheng M, Chiang YL, Lee HL et al. Self-Assembly of MinE on the Membrane Underlies Formation of the MinE-Ring to Sustain Function of the *E. coli* Min System. *J Biol Chem* 2014 [PMID: 24914211]

Ellis LC, Grant MH, Hawksworth GM, Weaver RJ. Quantification of biliary excretion and sinusoidal excretion of 5(6)-carboxy-2',7'-dichlorofluorescein (CDF) in cultured hepatocytes isolated from Sprague Dawley, Wistar and Mrp2-deficient Wistar (TR(-)) rats. *Toxicol In Vitro* 2014 [PMID: 24907646]

Selwa E, Davi M, Chenal A et al. Allosteric Activation of *Bordetella pertussis* Adenylyl Cyclase by Calmodulin: Molecular Dynamics and Mutagenesis Studies. *J Biol Chem* 2014 [PMID: 24907274]

Gundner AL, Hahn I, Sendscheid O et al. The PIKE Homolog Centaurin gamma Regulates Developmental Timing in *Drosophila*. *PLoS One* 2014 [PMID: 24845618]

Yadav MC, Huesa C, Narisawa S et al. Ablation of Osteopontin Improves the Skeletal Phenotype of Phospho1-/Mice. *J Bone Miner Res* 2014 [PMID: 24825455]

Afanasyeva A, Hirtreiter A, Schreiber A et al. Lytic Water Dynamics Reveal Evolutionarily Conserved Mechanisms of ATP Hydrolysis by TIP49 AAA+ ATPase. *Structure* 2014 [PMID: 24613487]

P SH, Solapure S, Mukherjee K et al. Optimization of Pyrrolamides as Mycobacterial GyrB ATPase Inhibitors: Structure-Activity Relationship and In Vivo Efficacy in a Mouse Model of Tuberculosis. *Antimicrob Agents Chemother*. 2014 [PMID: 24126580]

More publications at <http://www.novusbio.com/303-0030>



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