

# Product Datasheet

## PiColorlock ALS Colorimetric Assay Kit 302-0125

Unit Size: 625 Assays

Store at 4C. Do not freeze.

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**302-0125****PiColorlock ALS Colorimetric Assay Kit**

| <b>Product Information</b> |  |
|----------------------------|--|
| <b>Unit Size</b>           | 625 Assays   |
| <b>Concentration</b>       | Concentration is not relevant for this product. Please see the protocols for proper use of this product. |
| <b>Storage</b>             | Store at 4C. Do not freeze.  |
| <b>Buffer</b>              | Colorlock 625/1560 assays reagent is supplied with a phosphate standard solution                         |

| <b>Product Description</b> |  |
|----------------------------|--|
| <b>Description</b>         | <p>PiColorLock has been developed for measuring the activity of any Pi-generating enzyme. It is a superior phosphate detection reagent, with high stability of the dye-phosphate complex (unlike others that are prone to precipitation). It provides an alternative to hazardous radioactive methods and other less sensitive colorimetric assays. In our Phosphate Detection Systems, PiColorLock reagent is supplied with an Accelerator to overcome and with a Stabiliser to prevent high background signals with acid-labile substrates, as well as a Pi standard to prepare a standard curve.</p> <p><b>Features:</b></p> <ul style="list-style-type: none"> <li>• Special additive ensures low backgrounds with acid-labile substrates.</li> <li>• Unparalleled stability of Pi-dye complexes.</li> <li>• Reagent is compatible with almost any assay buffer.</li> <li>• No inhibition of color development by high concentrations of protein.</li> <li>• Stable reagent formulation - long shelf life.</li> <li>• Colorimetric, non-radioactive assay.</li> </ul> <p>There are two types of PiColorLock (and hence Phosphate Detection System) available:</p> <ul style="list-style-type: none"> <li>• PiColorLock ALS - standard sensitivity (developed for microplates and cuvettes)</li> <li>• PiColorLock Gold - high sensitivity (developed for microplates)</li> </ul> |

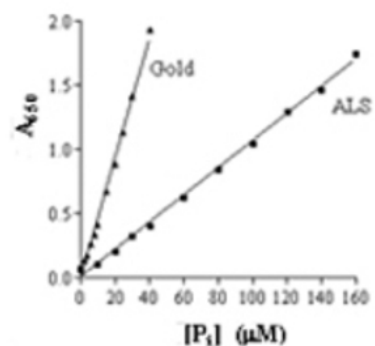


|                                    |  |
|------------------------------------|--|
| <b>Specificity/Sensitivity</b>     | <p>PiColorlock ALS Kit (625 Tests)</p> <p>Phosphatases, ATPases and several other enzymes catalyse reactions in which inorganic phosphate (Pi) is released from a substrate. PiColorLock ALS has been developed for measuring the activity of any Pi-generating enzyme. The reagent is formulated to give sensitive detection of Pi. It provides an alternative to hazardous radioactive methods and other less sensitive colorimetric assays.</p> <p>The measurement of Pi is based on the change in absorbance of malachite green in the presence of molybdate. Unlike other malachite dye formulations, PiColorLock ALS gives a completely stable end-point signal and is not prone to precipitation. Moreover, a proprietary stabilizer ensures that PiColorLock ALS can be used even with acid labile substrates.</p> <p>Features that make the PiColorlock ALS Kit such a powerful tool:</p> <ul style="list-style-type: none"> <li>Colorimetric, non-radioactive assay.</li> <li>Unparalleled stability of Pi-dye complexes.</li> <li>Stable reagent formulation - long shelf life.</li> <li>Reagent is compatible with almost any assay buffer.</li> <li>No inhibition of color development by high concentrations of protein.</li> <li>Special additive ensures low backgrounds with acid-labile substrates.</li> </ul> |
| <b>Notes</b>                       | PiColorlock® is a registered trademark of Innova Biosciences.  |
| <b>Product Application Details</b> |  |
| <b>Application Notes</b>           | 125.0 ml: Enough for 625 or 1560 assays is provided, depending on plate type. This kit is enough for 325 assays using 200ul PiColorLock Gold for 50ul samples (using 96-well plates) or for 1560 assays using 80ul PiColorLock Gold for 20ul samples (using 384-well plates).  |

## Images

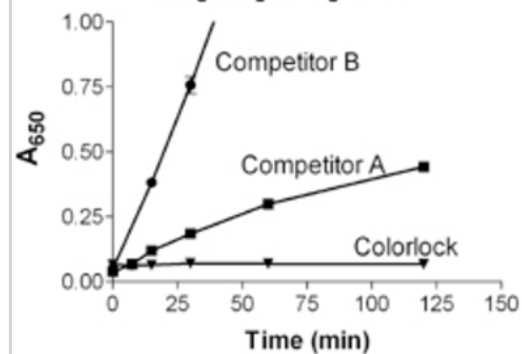
PiColorlock ALS Kit 625/1560 assays [302-0125]

Standard curves for Colorlock reagents.



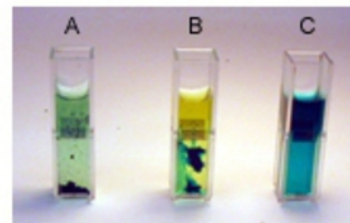
PiColorlock ALS Kit 625/1560 assays [302-0125]

Post assay degradation of substrate (1 mM ATP) leading to high backgrounds

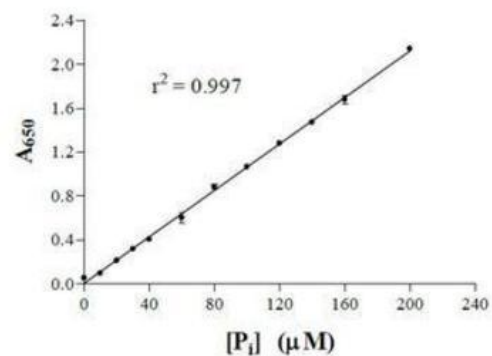


PiColorlock ALS Kit 625/1560 assays [302-0125]

Stability of Pi-dye complexes after 30 min.  
Colorlock (C) gives a stable signal while competitors A and B show extensive precipitation.



PiColorlock ALS Kit 625Tests [302-0125] - Calibration curve that was obtained using a 96-well plate with 50 l standard + 200ul ALS mix and 20ul of stabiliser) read after 30 min at A650.



## Publications

Low HH, Lowe J. A bacterial dynamin-like protein. Nature 2006 Dec 7 [PMID: 17122778]



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### **Limitations**

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Kits are guaranteed for 6 months from date of receipt.

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