PiColorLock (TM) Phosphate Detection Reagent
303-0030

Unit Size: 1 x 625/1560 Tests
Store at 4C.

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Updated 8/8/2018 v.20.1

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**Product Information**

<table>
<thead>
<tr>
<th>Unit Size</th>
<th>1 x 625/1560 Tests</th>
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<tbody>
<tr>
<td>Concentration</td>
<td>Please see the protocols for proper use of this product. If no protocol is available, contact technical services for assistance.</td>
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<tr>
<td>Storage</td>
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**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.

**Features**

- Colorimetric assay
- Simple, scalable and non-radioactive
- Compatible with almost any assay buffer
- Flexibility over a wide range of existing assays
- Stable reagent formulation
- Long shelf life
- Unique accelerator and stabilizer
- Speeds up color development
- PiColorLock-Pi complex is very stable
- No precipitation, results can be measured over several hours - ideal for HTS
- Wide linear range
- No inhibition of color development by high concentrations of protein

**Notes**

This product is manufactured by Expedeon Inc. and distributed by Novus Biologicals.
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


Basu A, Yap MN. Disassembly of the Staphylococcus aureus hibernating 100S ribosome by an evolutionarily conserved GTPase. Proc Natl Acad Sci U S A. 2017 Sep 26 [PMID: 28894000]


More publications at http://www.novusbio.com/303-0030
Limitations
This product is for research use only and is not approved for use in humans or in clinical diagnosis. Support products are guaranteed for 6 months from date of receipt.

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