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## Technical Data Sheet

**For research use only**  
Not intended or approved for  
diagnostic or therapeutic use.

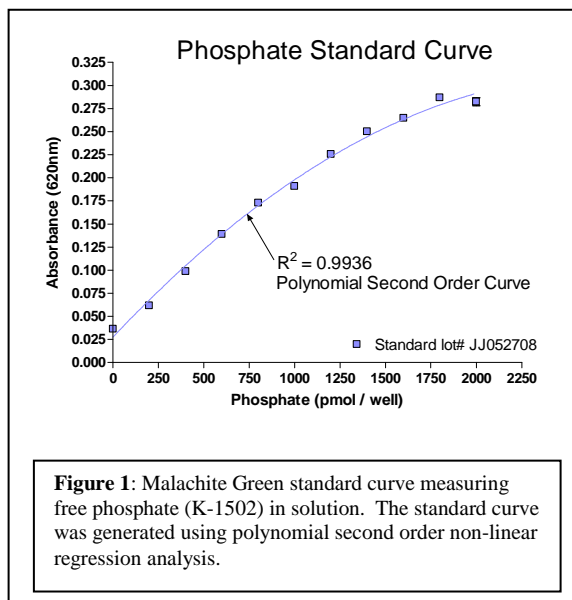
**Product Name:** Malachite Green Solution  
**Product Number:** K-1501  
**Storage:** Store at 4 °C for up to 6 months  
**Description:** Bottle containing 20 mL Malachite Green Solution

**Other materials required:**

- Microplate reader capable of measuring absorbance at 600-680. OD<sub>620</sub> is used in the protocols outlined below.
- Standard 96-well microplate plate or 1 mL cuvette
- 1mM Phosphate standard (Cat # 1502)

**Suggested Use:**

Echelon's Malachite Green Solution is designed for the *in vitro* measurement of phosphatase activity. The liberated phosphate, released with phosphatase activity, forms a colored complex with molybdate/malachite green. This colored complex is then quantified by reading the absorbance at 620 nm. This is a fast, convenient method that offers a flexible non-radioactive alternative for measuring specific phosphatase activities.



**Sensitivity:** The Malachite Green solution can measure as little as 50 pmoles of free phosphate and has a high level of accuracy in the range of 200 to 2,000 pmol of phosphate per assay point (see figure 1).

**Protocol:** Please refer to the technical data sheet (TDS) for the Malachite Green Phosphatase Assay kit (Cat #K-1500) for detailed protocols.

**Similar products:**

Product #	Description
K-1500	Malachite Green Phosphatase Assay Kit
K-1520	Malachite Green Phosphatase Assay Kit with the choice of two substrates
K-1530	Malachite Green Phosphatase Assay Kit with the choice of three substrates
K-1540	Malachite Green Phosphatase Assay Kit with the choice of four substrates

- References:**
1. B. Martin et al. J. Biol. Chem. 1985 **260** 14932
  2. K.W. Harder et al. Biochem. J. 1994 **298** 395
  3. R.B. Campbell et al. J. Biol. Chem. 2003 **278** 36