The PNPP phosphatase activity assay is non-expensive, and routinely used for the unit determination of all NEB protein phosphatases. PNPP has apparent $K_v$ values for protein phosphatases in the range of 0.5–10 mM (2–5).

The advantage of the PNPP phosphatase activity assay is that unlike radioactive assays the substrate concentration can be much higher than the $K_v$. The initial velocity can be recorded in the continuous assay, but the assay volume is larger than in a radioactive assay (about 1 ml to fill a 1 ml spectrophotometer cuvette) (1,2). The reaction volume in a single-point assay can be very small because the reaction is stopped with the amount of NaOH enough to fill the cuvette (1,3,4).

Supplied in: Sterile purified water.

Molecular Weight: 461.4 daltons [di(tris)salt].

Purity: >99% pure.

Suggested Working Concentration: 50–100 mM

Notes on Use in Protein Phosphatase Assay: The PNPP phosphatase activity assay is very simple, non-expensive, and routinely used for the unit determination of all NEB protein phosphatases.

References: