

**DATASHEET: TUBULIN PEM BUFFER**

**Catalog Number: 032002**

**Store at 4°C**

**Material:**

Tubulin PEM Buffer is comprised of 80 mM PIPES, 1 mM EGTA, and 1 mM MgCl<sub>2</sub> (pH 6.8 with KOH).

**Storage and Handling:**

Tubulin PEM Buffer is stable at 4°C for 1 year.

**Uses:**

Tubulin PEM Buffer supports the stability and activity of purified tubulin *in vitro* when supplemented with 1 mM each DTT and guanosine (GTP or GMPCPP).

**Polymerization Protocol:**

Dilute Lyophilized Tubulin (Cat. No. 142001) or Cycled Tubulin (Cat. No. 032005) to 2 mg/ml with Tubulin PEM Buffer and supplement with 1 mM each DTT and guanosine (GTP or GMPCPP). Incubate on ice for 5 minutes, then transfer to a 37°C water bath for 1 hour. If polymerized with GMPCPP or protected with Taxol, the resulting MTs will be stable at room temperature for several days. Do not place polymerized MTs on ice.