

DATASHEET: ACTIN POLYMER BUFFER (10X)

Catalog Number: 000103
Store at 4°C

Material:

Actin Polymer Buffer (10X) is comprised of 500 mM KCl and 20 mM MgCl₂.

Storage and Handling:

Actin Polymer Buffer (10X) is stable at 4°C for 1 year.

Uses:

Actin Polymer Buffer (10X) supports the polymerization of G-actin into F-actin *in vitro*.

Polymerization Protocol:

Dilute Ultra-Pure Actin (Cat. No. 160101) or Pure Actin (Cat. No. 190101) to 0.4 mg/ml with Actin Working Buffer (Cat. No. 000102; 5 mM Tris-HCl and 0.2 mM CaCl₂, pH 8.0) supplemented with 0.2 mM ATP and 1 mM DTT. Incubate on ice for 1 hour followed by centrifugation at 14k rpm for 15 minutes at 4°C. Collect the supernatant and add 1/10 volume of Actin Polymer Buffer (10X). Incubate at room temperature for 1 hour to polymerize. The resulting actin filaments can be stored at 4°C for 2 weeks with the addition of 0.05% sodium azide.