

DATASHEET: ACTIN WORKING BUFFER

Catalog Number: 000102

Store at 4°C

Material:

Actin Working Buffer is comprised of 5 mM Tris-HCl and 0.2 mM CaCl₂ (pH 8.0).

Storage and Handling:

Actin Working Buffer is stable at 4°C for 1 year.

Uses:

Actin Working Buffer supports the stability and activity of purified actin *in vitro* when supplemented with 0.2 mM ATP and 1 mM DTT.

Polymerization Protocol:

Dilute Ultra-Pure Actin (Cat. No. 160101) or Pure Actin (Cat. No. 190101) to 0.4 mg/ml with Actin Working Buffer 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; Cat. No. 000103; 500 mM KCl and 20 mM MgCl₂). 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.