



## G-Actin/F-actin In Vivo Assay Biochem Kit

### Product Information

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#### Cat.No.

Kit-0354

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#### Product Overview

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The most reproducible and accurate method of determining the amount of filamentous actin (F-actin) content versus free globular-actin (G-actin) content in a cell population is to use Western blot quantitation of F-actin and G-actin cellular fractions. The general approach is to homogenize cells in F-actin stabilization buffer, followed by centrifugation to separate the F-actin from G-actin pool. The fractions are then separated by SDS-PAGE and actin is quantitated by Western blot. The final result gives the most accurate method of determining the ratio of F-actin incorporated into the cytoskeleton versus the G-actin found in the cytosol. This kit contains all the reagents needed to perform this assay.

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#### Size

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30-100 assays

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#### Applications

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1. To study the effects of pharmaceutical compounds on the ratio of G-actin to F-actin. 2. To study the effects of mutated cell lines versus their parent cell line for the change in ratio of G-actin to F-actin. 3. To study the effects of physical alterations of environment on the ratio of G-actin to F-actin.

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#### Kit Components

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Reagent-Quantity -Storage  
Lysis and F-actin Stabilization Buffer: 1 bottle, 100 ml, 4°C; Protease Inhibitor Cocktail: 1 tube, lyophilized, Desiccated 4°C; ATP: 1 tube, lyophilized, Desiccated 4°C; F-actin Depolymerizing Buffer: 1 bottle, powder, 4°C; F-actin Enhancing Solution: 1 tube, lyophilized, Desiccated 4°C; G-actin Protein Standard: 1 tube, 250 µg, lyophilized, Desiccated 4°C; Anti-Actin Rabbit Polyclonal Antibody: 1 tube, 100 µg lyophilized, Desiccated 4°C; SDS Sample Buffer: 2 tubes, 1.5 ml, 5x stock, 4°C; DMSO: 2 tubes, 1 ml, 4°C

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