

Product Information

Actin from rabbit muscle

Product Number **A 2522**

Storage Temperature 2-8 °C

Product Description

CAS Number: 51005-14-2

Extinction coefficient: $E^{1\%} = 1.11$ (G-actin),
1.17 (F-actin)

pI: 5.47 (α), 5.53 (β), 5.50 (γ)^{6, 7, 8, 9}

This material is prepared from skeletal muscle by using a modification of a reported method.¹ The molecular weight of the polypeptide by sequence analysis is 41.785 kDa and when calcium and ATP are included, the total is 42.3 kDa.^{2,3} Methods have been reported for converting this product to the F-actin form.⁵

Monomeric rabbit actin has been used to inhibit DNase I, with a binding constant = $5 \times 10^8 \text{ M}^{-1}$.¹⁰ The atomic structure of the actin:DNase I complex along with the amino acid sequence has been reported. It is noted that the ability of actin to polymerize is lost after forming a 1:1 complex with DNase I.¹¹

Precautions and Disclaimer

For Laboratory Use Only. Not for drug, household or other uses.

Preparation Instructions

This material is soluble in water (1 mg/ml), yielding a hazy solution.

References

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