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Product Information

Stathmin, His-tagged, human recombinant, expressed in *E. coli* cells

Catalog Number **SRP5144**
Storage Temperature –70 °C

Synonyms: STMN1, C1orf215, FLJ32206, Lag, LAP18, MGC138869, MGC138870, OP18, PP17, PP19, PR22, SMN

Product Description

Stathmin is a ubiquitous, highly conserved protein present in the cytoplasm in a variety of unphosphorylated and phosphorylated forms. Stathmin functions as an intracellular relay integrating regulatory signals of the cellular environment.[1] Stathmin is involved in the regulation of the microtubule filament system. Stathmin binds tubulin in a ternary complex, with 2 tubulins for every stathmin and this complex interferes with microtubule dynamics *in vitro* and *in vivo*. Overexpression of several stathmin mutants suggests stathmin induces depolymerization of interphase and mitotic microtubules in its unphosphorylated state, but is inactivated by phosphorylation in mitosis.[2]

Recombinant, full-length, human Stathmin protein was expressed in *E. coli* cells using an N-terminal His tag. The gene accession number is BC014353. Recombinant protein stored in 50 mM sodium phosphate, pH 7.0, 300 mM NaCl, 150 mM imidazole, 0.1 mM PMSF, 0.25 mM DTT, and 25% glycerol.

Molecular mass: ~19 kDa

Purity: 70–95% (SDS-PAGE, see Figure 1)

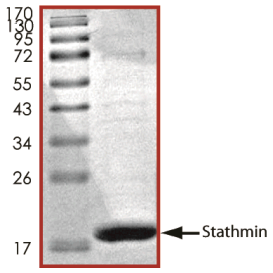
Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

The product ships on dry ice and storage at –70 °C is recommended. After opening, aliquot into smaller quantities and store at –70 °C. Avoid repeated handling and multiple freeze/thaw cycles.

Figure 1.
SDS-PAGE Gel of Typical Lot
70–95% (densitometry)



References

1. Sobel, A., Stathmin, a relay phosphoprotein for multiple signal transduction? Trends Biochem. Sci., **16**, 301-305 (1991).
2. Gavet, O. et al., The stathmin phosphoprotein family: intracellular localization and effects on the microtubule network. J. Cell Sci., **111**, 3333-3346 (1998).

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