Note: Centrifuge before opening to ensure complete recovery of vial contents.

| Description |  |
| :---: | :---: |
| Synonyms | Stathmin;Leukemia-Associated Phosphoprotein p18;Metablastin;Oncoprotein 18;Op18;Phosphoprotein p19;pp19;Prosolin;Protein Pr22;pp17;STMN1;C1orf215;LAP18;OP18 |
| Species | Human |
| Expression Host | E.coli |
| Sequence | Ala2-Asp149 |
| Accession | P16949 |
| Calculated Molecular Weight | 18.4 kDa |
| Observed molecular weight | 20 kDa |
| Tag | C-His |
| Properties |  |
| Purity | > $95 \%$ as determined by reducing SDS-PAGE. |
| Endotoxin | $<1.0 \mathrm{EU}$ per $\mu \mathrm{g}$ of the protein as determined by the LAL method. |
| Storage | Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to $-80^{\circ} \mathrm{C}$. Reconstituted protein solution can be stored at $4-8^{\circ} \mathrm{C}$ for 2-7 days. Aliquots of reconstituted samples are stable at $<-20^{\circ} \mathrm{C}$ for 3 months. |
| Shipping | This product is provided as lyophilized powder which is shipped with ice packs. |
| Formulation | Lyophilized from a $0.2 \mu \mathrm{~m}$ filtered solution of $20 \mathrm{mM} \mathrm{PB} 150 \mathrm{mM} \mathrm{NaCl},, \mathrm{pH} 7.4$. Normally $5 \%-8 \%$ trehalose, mannitol and $0.01 \%$ Tween 80 are added as protectants before lyophilization. <br> Please refer to the specific buffer information in the printed man |
| Reconstitution | Please refer to the printed manual for detailed information. |
| Data |  |


| KDa | MK | R |
| ---: | :--- | ---: | :--- |
|  |  |  |
| 120 |  |  |
| 90 |  |  |
| 60 |  |  |
| 40 |  |  |
| 30 |  |  |
| 20 |  |  |
| 14 |  |  |

$>95 \%$ as determined by reducing SDS-PAGE.

## Background

Stathmin (STMN1) is a ubiquitous cytosolic phosphoprotein which belongs to the Stathmin family. STMN1 is expressed in many tissues, with the highest expression in the brain, spinal cord, and cerebellum. It can also be expressed in the colon, ovary, placenta, uterus, and trachea. STMN1 participates in the regulation of the microtubule filament structure by destabilizing microtubules. STMN1 promotes the disassembly of microtubules and prevents assembly. STMN1 is involved in the control of the learned and innate fear. STMN1 is an intracellular relay integrating regulatory signals of the cellular environment and as an Oncoprotein in regulation of the cell cycle. Phosphorylation at Ser-16 may be required for axon

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# Recombinant Human STMN1 Protein (His Tag) 

Catalog Number:PKSH033079
formation during neurogenesis. Mutation in STMN1 effects cell homeostasis that may lead to tumorigenicity.

