Accepted Manuscript

Diverse role of Survival Motor Neuron Protein

Ravindra N. Singh, Matthew D. Howell, Eric W. Ottesen, Natalia N. Singh

PII: DOI: Reference:

s1874-9399(16)30275-9 doi:10.1016/j.bbagrm.2016.12.008 ence: BBAGRM 1122

To appear in: BBA - Gene Regulatory Mechanisms

Received date:4 December 2016Revised date:23 December 2016Accepted date:30 December 2016



Please cite this article as: Ravindra N. Singh, Matthew D. Howell, Eric W. Ottesen, Natalia N. Singh, Diverse role of Survival Motor Neuron Protein, *BBA - Gene Regulatory Mechanisms* (2017), doi:10.1016/j.bbagrm.2016.12.008

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT

Diverse role of Survival Motor Neuron Protein

Ravindra N. Singh*, Matthew D. Howell, Eric W. Ottesen, Natalia N. Singh

Department of Biomedical Sciences, Iowa State University, Ames, IA, 50011

Running Title: SMN Functions

*Corresponding author.

Department of Biomedical Sciences; Iowa State University, 2035 Veterinary Medicine, Ames, IA, 50011, Tel.: 515-294-8505, Fax: 515-294-2315, Email: <u>singhr@iastate.edu</u>

Abbreviations: SMA, spinal muscular atrophy; ALS, amyotrophic lateral sclerosis; SMN, Survival Motor Neuron; RNP, ribonucleoprotein; hnRNP, heteronuclear RNP; snRNA, small nuclear RNA; snoRNA, small nucleolar RNA; rRNA, ribosomal RNA; snRNP, small nuclear RNP; snoRNP, small nucleolar RNP; TERC, Telomerase RNA component (TERC); TERT, Telomerase Reverse Transcriptase; TGS1, Trimethylguanosine Synthase 1, TMG, 2,2,7trimethylguanosine; SG, Stress granule; CG, Cajal body; iCDR, Centromeric Damage Response; NMJ, Neuromuscular junction; TCR, transcription-coupled repair; CBP20, Cap-Binding Protein 20; CBP80, Cap-Binding Protein 80; EWS, Ewing's Sarcoma Protein, FMRP, Fragile X Mental Retardation Protein; PHAX, Phosphorylated Adaptor for RNA Export; Sec, Selenocysteine; Secis, Sec insertion sequence; SBP2, Secis-Binding Protein 2; TIA1, T-cell Restricted Intracellular Antigen 1; WRAP53, WD40 Repeat-Containing Protein Encoding RNA Antisense to p53; Xpo1, Exportin 1.

Keywords: Spinal muscular atrophy, SMA, Survival Motor Neuron, SMN, splicing, snRNP biogenesis, snoRNP biogenesis, SBP2, telomerase, TERC, TERT, TMG, transcription, splicing, DNA repair, selenoprotein, signal recognition particle, Cajal body, Gem

Download English Version:

https://daneshyari.com/en/article/5507696

Download Persian Version:

https://daneshyari.com/article/5507696

Daneshyari.com