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Fox-3   1 .....MAQPYPPAQYPPPPQNGIPAEYAPPPPHPT
          | | | | | | | | | | | | | | | | | |
Fox-2   1 MEKKKNVTOGNOEPTTIPDAHVQFFTTIPFPFPQNGIPTEYG. VPH T
          | | | | | | | | | | | | | | | | | |
Fox-1   1 MNCERFQLRGNOEAAAAPDTMAQFYASAQF . APPQNGIPAEYTAAPHPHA

Fox-3  31 QDYSGQTPVPEHGMHTLYTPAQTHPEQPGT EASTOPTAGTQTVPQADEAA
          | | | | | | | | | | | | | | | | | |
Fox-2  48 QDYAGQTS . EHNLTLYGSTQPHGEQSSN .SPSNQNGSLTQTEGGA . . .
          | | | | | | | | | | | | | | | | | |
Fox-1  50 PEYTGQTIWP .DHTLNLYFPPTQTHEQSADTSAQTVSGTATQIDDA . . .

Fox-3  81 QTDNQ . QLHPSDPT E.KOOPKRLHVSNIIPFRFRDPLDROMFGQFGKILD
          | | | | | | | | | | | | | | | | | |
Fox-2  91 QTDGQOSQTSSENSEKSTPKRLHVSNIIPFRFRDPLDROMFGQFGKILD
          | | | | | | | | | | | | | | | | | |
Fox-1  96 PTDG . QFQTPSENTESKSPKRLHVSNIIPFRFRDPLDROMFGQFGKILD

Fox-3  128 VEIIFNERGSKGFVVFETSSDADRAREKLNGLIVEGRKIEVNNATARV
          | | | | | | | | | | | | | | | | | |
Fox-2  141 VEIIFNERGSKGFVVFENSADADRAREKLGTVVEGRKIEVNNATARV
          | | | | | | | | | | | | | | | | | |
Fox-1  145 VEIIFNERGSKGFVVFENSADADRAREKLGTVVEGRKIEVNNATARV

Fox-3  178 MTNKKPGNPYANGWKLNPVVGTVYGPYFVAVTSFPYPTT .GTAVAYRGAH
          | | | | | | | | | | | | | | | | | |
Fox-2  191 MTNKKNVTPYANGWKLSPVVGAVYGPELYAASSFOADVSLGNEAAVP . . .
          | | | | | | | | | | | | | | | | | |
Fox-1  195 MTNKKTVNPTYNGWKLNPVVGAVYSPDFYAGTVLLQAN . .OEGSSM . . .

Fox-3  227 LRGRGRAVYNTFRAAAPPPPIPTYGAALEQTLVKMPVPWAGLAPCPLPPO
          | | | | | | | | | | | | | | | | | |
Fox-2  238 LSGRGG . INTY . . . IPLLIPGFPPYPTAATTA . . . . . AAFRGAHL . R
          | | | | | | | | | | | | | | | | | |
Fox-1  240 YSGPSS . L . VY . . . TS . AMPGFYP . AATAA . . . . . AAYRGAHL . R

Fox-3  277 QTPEPAYPTSP . AFPPISCFASRVVYQDGFYGAELVGGYAAAYRYAOPAAA
          | | | | | | | | | | | | | | | | | |
Fox-2  274 GRGRIVYGAVR . AVPPTAIPAYPGVYQDGFYGAELVGGYAAAYRYAOPATA
          | | | | | | | | | | | | | | | | | |
Fox-1  273 GRGRIVYNTFRAAAAPPPPIPAYGGVYQDGFYGAELVGGYAAAYRYAOPTPA

Fox-3  327 T . . . . . AAAYSDSYGRVYAAADPYHHTIGPTATYSIGTM . . . . .
          | | | | | | | | | | | | | | | | | |
Fox-2  324 TAATAAAAAAAAAAYSDCYGRVY . TADPY . HALAPAAASYGVGAV . . . . .
          | | | | | | | | | | | | | | | | | |
Fox-1  324 T . . . . . AAAYSDSYGRVY . AADPYHHTLAPPTYGVGANNAFAPLTDA

Fox-3  361 . . . . . ASLCRGGYSRFTPY* 374
          | | | | | | | | | | | | | | | | | |
Fox-2  374 . . . . . ASLYRGGYSRFAPY* 377
          | | | | | | | | | | | | | | | | | |
Fox-1  366 KTRSHADDVGLVLSSLQ&SIYRGGYNRFAPY* 396

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Figure S1. Amino acid alignment of the Fox-1 gene family. Among several isoforms for Fox-2 and Fox-1, F011 and A016 published previously (Nakahata & Kawamoto, 2005, *Nucleic Acids Res* **33**, 2078) are shown as Fox-2 and Fox-1, respectively. The underlined amino acids in Fox-3 indicate the sequences obtained by MS analysis. The blue and green letters in Fox-3 can be included or excluded depending on alternative pre-mRNA splicing, therefore potentially 4 isoforms exist. The red letters indicate the RNA recognition motif. The vertical lines and colons between sequences indicate identical and similar aa, respectively, compared to Fox-2.

A

MTQALPR
 GSHSQSSSPGALTGR
 QTAAAAATFSEQVGGGSGGAGR
 EMLSSTYPVWVK
 DHIEVVGSSMPLIGDHQDEDK
 TYATAEPFIDAK
 SLKPDFVLIR
 VLLVIDEPHTDWAK
 KLGTEEFPLIDQTFYPNHK
 VDNQHDFQDIASVVALTK
 QLIVELVVNK
 ASTAAPVASPAAPSPGSSGGGGFFSSLSNAVK
 LWVDTCEIFGGLDICAVALHGK
 TNTGSAMLEQIAMSDR
 QGPPQKPPGPAGPTR
 QTSQQPAGPPAQRRPPQGGPPQPGPGPQR
 QSRPVAGGPGAPPAARPPASPSQR
 TSVSGNWK
 LPSPTAAPQQSASQATPVTQGQGR
SQSLTNAFNLPEPAPRPSLSQDEVKAETIR

B

MTQALPR
 QASISGPATK
 QTSQQPAGPPAQRRPPQGGPPQPGPGPQR
 QSRPVAGGPGAPPAARPPASPSQR
 TSVSGNWK
 LPSPTAAPQQSASQATPVTQGQGR
 GSHSQSSSPGALTGR
 QTAAAAATFSEQVGGGSGGAGR
 EMLSSTYPVWVK
 TYATAEPFIDAK
 DHIEVVGSSMPLIGDHQDEDK
 SLKPDFVLIR
 VLLVIDEPHTDWAK
 KLGTEEFPLIDQTFYPNHK
 VDNQHDFQDIASVVALTK
 QLIVELVVNK
 ASTAAPVASPAAPSPGSSGGGGFFSSLSNAVK
 VEQAEFSDLNLVAHANGGFSVDMEVLR
 LGTEEFPLIDQTFYPNHK
 TNTGSAMLEQIAMSDR

Figure S2. Tryptic peptide sequences of the 70 kDa proteins identified as synapsin I by MS analysis. Each of the doublet band proteins immunoprecipitated with anti-NeuN was subjected to MS analysis. The peptide sequences obtained from the upper band (A) and the lower band (B) are shown. The sequence shown in bold letters is unique to the isoform synapsin Ia, and all other sequences are common to two alternatively spliced isoforms of synapsin I, Ia and Ib.