

Table S1 High-confidence NUSAP1 interactors from AP-MS in vehicle-treated non-synchronized 293T cells

Gene Name	Protein Name	Uniprot ID	Spectral Counts	ctrlCounts	SaintScore	BFDR
<i>NUSAP1</i>	Nucleolar and spindle-associated protein 1	Q9BXS6	1070 1070 1055	0 0 0	1	0
<i>RBMX</i>	RNA-binding motif protein, X chromosome	P38159	415 415 262	19 25 22	1	0
<i>MDC1</i>	Mediator of DNA damage checkpoint protein 1	Q14676	66 66 73	0 0 0	1	0
<i>MKI67</i>	Proliferation marker protein Ki-67	P46013	91 91 59	0 0 0	1	0
<i>HP1BP3</i>	Heterochromatin protein 1-binding protein 3	Q5SSJ5	54 54 55	0 0 0	1	0
<i>RPL12</i>	60S ribosomal protein L12	P30050	27 27 23	1 0 0	1	0
<i>WTAP</i>	Pre-mRNA-splicing regulator WTAP	Q15007	64 64 43	0 0 0	1	0
<i>CHTOP</i>	Chromatin target of PRMT1 protein	Q9Y3Y2	35 35 42	0 0 0	1	0
<i>STAU1</i>	Double-stranded RNA-binding protein Staufen homolog 1	O95793	43 43 33	0 0 0	1	0
<i>PSIP1</i>	PC4 and SFRS1-interacting protein	O75475	39 39 26	0 0 0	1	0
<i>CCDC86</i>	Coiled-coil domain-containing protein 86	Q9H6F5	13 13 16	0 0 1	1	0
<i>IGF2BP1</i>	Insulin-like growth factor 2 mRNA-binding protein 1	Q9NZI8	21 21 21	0 0 0	1	0
<i>PINX1</i>	PIN2/TERF1-interacting telomerase inhibitor 1	Q96BK5	29 29 19	0 0 0	1	0
<i>RPS20</i>	40S ribosomal protein S20	P60866	25 25 27	2 0 1	1	0
<i>RPS21</i>	40S ribosomal protein S21	P63220	25 25 58	0 1 2	1	0
<i>RPL21</i>	60S ribosomal protein L21	P46778	34 34 36	3 3 4	1	0
<i>HNRNPA0</i>	Heterogeneous nuclear ribonucleoprotein A0	Q13151	17 17 19	0 0 0	1	0
<i>ILF3</i>	Interleukin enhancer-binding factor 3	Q12906	43 43 80	2 0 0	1	0

<i>CCDC137</i>	Coiled-coil domain-containing protein 137	Q6PK04	17 17 15	0 0 0	1	0
<i>H1-2</i>	Histone H1.2	P16403	99 99 50	8 6 13	1	0
<i>EIF6</i>	Eukaryotic translation initiation factor 6	P56537	22 22 14	0 0 0	1	0
<i>HAKAI</i>	E3 ubiquitin-protein ligase Hakai	Q75N03	13 13 13	0 0 0	1	0
<i>PAIRBP1</i>	Plasminogen activator inhibitor 1 RNA-binding protein 1	Q8NC51	14 14 13	0 0 0	1	0
<i>DHX9</i>	DEAH box protein 9 (ATP-dependent RNA helicase A)	Q08211	9 9 45	0 1 0	1	0
<i>DPY30</i>	Protein dpy-30 homolog	Q9C005	17 17 12	0 0 0	1	0
<i>GAR1</i>	H/ACA ribonucleoprotein complex subunit 1	Q9NY12	8 8 11	0 0 1	1	0
<i>RALY</i>	RNA-binding protein Raly	Q9UKM9	9 9 20	0 0 0	1	0
<i>FUS</i>	RNA-binding protein FUS	P35637	23 23 19	3 3 1	1	0
<i>CIRBP</i>	Cold-inducible RNA-binding protein	Q14011	12 12 8	0 0 0	1	0
<i>NOL7</i>	Nucleolar protein 7	Q9UMY1	8 8 10	0 0 0	1	0
<i>NOP10</i>	H/ACA ribonucleoprotein complex subunit 3	Q9NPE3	9 9 8	0 0 0	1	0
<i>NUPL2</i>	Nucleoporin-like protein 2	O15504	8 8 15	0 0 0	1	0
<i>RPS29</i>	40S ribosomal protein S29	P62273	7 7 7	0 0 0	1	0
<i>THOC4</i>	THO complex subunit 4	Q86V81	25 25 20	5 1 3	1	0
<i>RPS11</i>	40S ribosomal protein S11	P62280	19 19 18	0 3 3	1	0
<i>CBX1</i>	Chromobox protein homolog 1	P83916	6 6 7	0 0 0	1	0
<i>H1-0</i>	Histone H1.0	P07305	6 6 6	0 0 0	1	0
<i>RPL31</i>	60S ribosomal protein L31	P62899	22 22 18	2 3 5	1	0
<i>RPL23A</i>	60S ribosomal protein L23a	P62750	24 24 26	4 8 6	1	0
<i>RPLP1</i>	60S acidic ribosomal protein P1	P05386	14 14 18	2 2 2	1	0
<i>HNRNPCL1</i>	Heterogeneous nuclear ribonucleoprotein C-like 1	O60812	21 21 16	2 2 5	1	0

<i>C11orf98</i>	Uncharacterized protein C11orf98	E9PRG8	5 5 6	0 0 0	1	0
<i>TIMM8B</i>	Mitochondrial import inner membrane translocase subunit Tim8 B	Q9Y5J9	7 7 5	0 0 0	1	0
<i>RPL7A</i>	60S ribosomal protein L7a	P62424	35 35 38	4 12 8	1	0
<i>RPL28</i>	60S ribosomal protein L28	P46779	25 25 27	0 5 2	1	0
<i>NHP2</i>	H/ACA ribonucleoprotein complex subunit 2	Q9NX24	4 4 6	0 0 0	1	0
<i>PHC2</i>	Polyhomeotic-like protein 2	Q8IXK0	4 4 5	0 0 0	1	0
<i>MRPS17</i>	28S ribosomal protein S17	Q9Y2R5	4 4 10	0 0 0	1	0
<i>MRPS28</i>	28S ribosomal protein S28	Q9Y2Q9	4 4 4	0 0 0	1	0
<i>RPL36A</i>	60S ribosomal protein L36a	P83881	17 17 19	0 3 0	1	0
<i>RPL35A</i>	60S ribosomal protein L35a	P18077	5 5 4	0 0 1	1	0
<i>CBX3</i>	Chromobox protein homolog 3	Q13185	16 16 20	0 4 4	1	0
<i>NUMA1</i>	Nuclear mitotic apparatus protein 1	Q14980	14 14 3	0 0 0	1	0
<i>RPL22</i>	60S ribosomal protein L22	P35268	7 7 3	0 0 0	1	0
<i>RPLP0</i>	60S acidic ribosomal protein P0	P05388	3 3 13	0 0 0	1	0
<i>RRP15</i>	RRP15-like protein	Q9Y3B9	7 7 3	0 0 0	1	0
<i>RPS12</i>	40S ribosomal protein S12	P25398	6 6 3	0 0 0	1	0
<i>SRP14</i>	Signal recognition particle 14 kDa protein	P37108	3 3 3	0 0 0	1	0
<i>ZC3H8</i>	Zinc finger CCCH domain-containing protein 8	Q8N5P1	3 3 3	0 0 0	1	0
<i>RPS10L</i>	Putative 40S ribosomal protein S10-like	Q9NQ39	17 17 24	4 4 7	1	0
<i>HNRNPC</i>	Heterogeneous nuclear ribonucleoproteins C1/C2	P07910	21 21 33	6 0 0	1	0
<i>H1-10</i>	Histone H1.10	Q92522	19 19 17	0 5 5	1	0
<i>RPL34</i>	60S ribosomal protein L34	P49207	7 7 7	0 2 0	0.99	0
<i>H2AV</i>	Histone H2A.V	Q71UI9	12 12 11	0 4 2	0.99	0
<i>RPS26</i>	40S ribosomal protein S26	P62854	3 3 4	0 0 1	0.99	0

<i>ILF2</i>	Interleukin enhancer-binding factor 2	Q12905	2 2 8	0 0 0	0.99	0
<i>KPNA2</i>	Importin subunit alpha-1	P52292	2 2 9	0 0 0	0.99	0
<i>RALYL</i>	RNA-binding Raly-like protein	Q86SE5	2 2 3	0 0 0	0.99	0
<i>RPL30</i>	60S ribosomal protein L30	P62888	4 4 2	0 0 0	1	0
<i>MRPL54</i>	39S ribosomal protein L54	Q6P161	2 2 2	0 0 0	0.99	0
<i>RBMXL1</i>	RNA binding motif protein, X-linked-like-1	Q96E39	2 2 5	0 0 0	0.99	0
<i>RRP12</i>	RRP12-like protein	Q5JTH9	3 3 2	0 0 0	0.99	0
<i>SAP30BP</i>	SAP30-binding protein	Q9UHR5	2 2 4	0 0 0	0.99	0
<i>YBX3</i>	Y-box-binding protein 3	P16989	7 7 2	0 0 0	1	0
<i>ZNF346</i>	Zinc finger protein 346	Q9UL40	4 4 2	0 0 0	1	0
<i>ZNF48</i>	Zinc finger protein 48	Q96MX3	11 11 2	0 0 0	1	0
<i>RPL23</i>	60S ribosomal protein L23	P62829	8 8 9	0 2 3	0.99	0
<i>RPS16</i>	40S ribosomal protein S16	P62249	11 11 17	2 4 4	0.98	0
<i>RPS28</i>	40S ribosomal protein S28	P62857	19 19 6	3 1 1	0.98	0
<i>RPL29</i>	60S ribosomal protein L29	P47914	29 29 26	17 2 1	0.95	0
<i>HIST2H2AA</i>	Histone H2A type 2-A	Q6FI13	3 3 5	0 1 1	0.92	0
<i>RPL8</i>	60S ribosomal protein L8	P62917	21 21 13	4 8 1	0.91	0