

CW-Tau fights proteinopathy by improving autophagy and diminishing Tau seeding activity

Francisco Vallejo-Bedia^{1,2}, Indalo Domene-Serrano ^{2,3}, Anastasia Stoliarov⁴, Raquel Cuadros^{2,5}, Mar Pérez¹, Esperanza Morato², Nuria Sánchez², Daniel Ruiz-Gabarre², Félix Hernández², Vega García-Escudero^{1,2,5,6*} and Jesús Avila^{2,5*}

¹ Anatomy, Histology and Neuroscience Department, School of Medicine, Universidad Autónoma de Madrid (UAM), 28029, Madrid, Spain.

² Centro de Biología Molecular Severo Ochoa (CBM), UAM-CSIC, 28049, Madrid, Spain.

³ Facultad de Ciencias Experimentales, Universidad Francisco de Vitoria, Pozuelo de Alarcón, Madrid, Spain

⁴ Graduate Program in Neuroscience, Universidad Autónoma de Madrid (UAM), 28029, Madrid, Spain.

⁵ Networking Research Centre on Neurodegenerative Diseases (CIBERNED), Instituto de Salud Carlos III, 28029, Madrid, Spain.

⁶ Institute for Molecular Biology-IUBM (Universidad Autónoma de Madrid), 28049, Madrid, Spain.

*corresponding authors: v.garcia-escudero@uam.es and javila@cbm.csic.es

Supplementary figure 2. Protein coverage of W-Tau peptide-binding proteins shown in Table 2. Coverage images of the eluted fraction of W-Tau peptide-binding proteins from both control and AD samples, along with their possible post-translational modifications. Proteins analyzed (as listed in Table 2) include: Microtubule associated proteins (MAPs) specifically MAP1B—featuring a schematic representation of heavy and light chain peptides (**A**)— and MAP2 (**B**), Tau (**C**), and Tubulin polymerization-promoting protein (TPPP) (**D**).

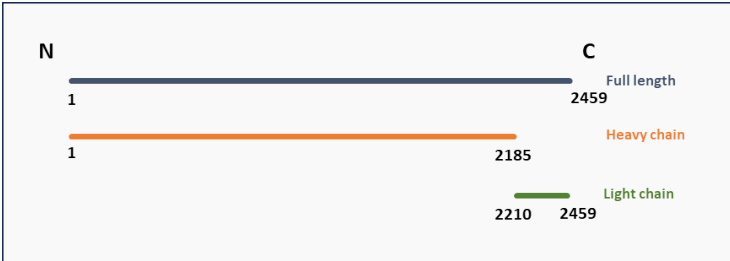
A

MICROTUBULE ASSOCIATE PROTEIN 1B
(MAP1B_HUMAN)

Eluted control

1	MATVVVEATE	PEPSGSIANP	AASTSPSLSH	RFLDSKFYLL	VVVGEIVTEE	HLRRAIGNIE	LGIR	SWDTNL	IECNLDQELK
81	LFVSRHSARF	SPEVPGQKIL	HHRSDVLETV	VLINPSDEAV	STEVRLMITD	AARHKLLVLT	GQCFENTGEL	ILQSGSFSFQ	
161	NFIEIFTDQE	IGELLSTTHP	ANKASLTLCF	PEEGDWKNSN	LDRHNLQDFI	NIKLNASIL	PEMEGLSEFT	EYLSSEVEVP	
241	SPFDILEPPT	SGGFLKLSKP	CCYIFPGGRG	DSALFAVNGF	NMLINGGSSER	KSCFWKLIRH	LDRVDSILLT	HIGDDNLPFI	
321	NSMLQRKIAE	LEEEQSQGST	TNSDWMKNLI	SPDLGVVFLN	VPENLKNPEP	NIKMKRSIEE	ACFTLYLYLNK	LSMKPEPLFR	
401	SVGNTIDPVI	LFQKMGVGL	EMYVLNPVKS	SKEMQYFMQQ	WTGTNKDKAE	FILPNGQEVD	LPISYLTSVS	SLIVWHPANP	
481	AEKIIRVLFP	GNSTQYNILE	GLEKLKHLDF	LKQPLATQKD	LTGQVPTFVV	KQTKLKQRAD	SRESLKPAAK	PLPSKSVRKE	
561	SKEETPEVTK	VNHVEKPPKV	ESKEKVMVKK	DKPIKTETKP	SVTEKEVPSK	EEPSFVKAEV	AEKQATDVKP	KAKEKTVKK	
641	ETKVKPEDKK	EEKEKPKKEV	AKKEDKTIK	KEEKPKKEEV	KKEVKKEIKK	EEKKEPKKEV	KKETPPKEVK	KEVKKEEKKE	
721	VKKEEKEPKK	EIKKLPKDAK	KSSTPLSEAK	KPAALKPKVP	KKEESVKKDS	VAAGKPKKEG	KIKVIKKEGK	AAEAVAAAVG	
801	TGATTAAVMA	AAGIAAIGFA	KELEAERSLM	SSPEDLTADF	EELKAEVDV	TKDIKPQLEL	IEDEEKLKET	EPVEAYVIQK	
881	EREVTKGPAE	SPDEGITTE	GEGECEQTP	ELEPVEKQGV	DDIEKFEDG	AGFEESSETG	DYEEKAETEE	AEEPEEDGEE	
961	HVCVSASKHS	PTEDEESAKA	EADAYIREKR	ESVASGDDRA	EEDMDEAIEK	GEAEQSEEEA	DEEDKAEDAR	EEYEPEKME	
1041	AEDYVMVAVD	KAAEAGGAE	QYGLTTPTK	QLGAQSPGRE	PASSIHDETL	PGGSESEATA	SDEENREDQP	EFTTATSGYT	
1121	QSTIEISSEP	TPMDEMSTPR	DVMSDETNE	ETESPSQEFV	NITKYESSLY	SQEYSKPADV	TPLNGFSEGS	KTDATDGKDY	
1201	NASASTISPP	SMMEEDKFSR	SALRDAYCSE	VKASTTLDIK	DSISAVSSEK	VSPSKSPSL	SPPPSPLEKT	PLGERSVNFS	
1281	LTPNEIKVSA	EAEVAPVSPE	VTQEVVEEHC	ASPEDKTLEV	VSPSQSVTGS	AGHTPYQSP	TDEKSSHLPT	EVIEKPPAVP	
1361	VSFEFSDAKD	ENERASVSPM	DEVPDSESP	IEKVLSPSL	PPLIGSESAY	ESFLSADDKA	SGRGAESPFE	EKSGKQGSFD	
1441	QVSPVSEMTS	TSLYQDKQEG	KSTDFAPIKE	DFGQEKKTDD	VEAMSSQPAL	ALDERKLGVD	SPTQIDVSQF	GSFKEDTKMS	
1521	ISEGTVSDKS	ATPVDEGVAE	DTYSHMEGVA	SVSTASVATS	SFPEPTDDV	SPSLHAEVGS	PHSTEVDDSL	SVSVQVTPTT	
1601	FQETEMSPSK	EECPRPMIS	PPDFSPKTAK	SRTVPQDHR	EQSSMSIEFG	QESPEQSLAM	DFSRQSPDHP	TVGAGVLHIT	
1681	ENGPTVDYS	PSDMQDSSL	HKIPPMEEPS	YTQDNDLSEL	ISVSQVEASP	STSSAHTPSQ	IASPLQEDTL	SDVAPPDRMS	
1761	LYASLTSEKV	QSLEGEKLS	KSDISPLTPR	ESSPLYSPTF	SDSTSAVKEK	TATCHSSSSP	PIDAASAEPY	GFRASVLFD	
1841	MQHHLALNRD	LSTPGLKEDS	GGKTPGDFSY	AYQKPEETTR	SPDEEDYDYE	SYEKTTRTSD	VGGYIEKIE	RTTKSPSDSG	
1921	YSYETIGKTT	KTPEDGDYSY	EIEKTTTRTP	EEGGYSYDIS	EKTTSPEEVS	GYSYEKTERS	RRLDDISNG	YDDSEDGGHT	
2001	LGDPYSYSYET	TEKITSFPES	EGYSYETSTK	TTRTPDTSTY	CYETAEKITR	TPQASTYSYE	TSDLCYTAEK	KSPSEARQDV	
2081	DLCLVSSCEY	KHPKTELS	FINPNLEWF	ASEEPTEESE	KPLTQSGGAP	PPPGGKQQR	QCDETPPTSV	SESAPSQTDS	
2161	DVPPETEEC	SITADANIDS	EDESEITPTD	KTVTYKHMDP	PPAPVQDRSP	SPRHPDVSMV	DPEALAIEQN	LKALKKDLK	
2241	EKTTKTKPGT	KTKSSSPVK	SDGSKPLAA	SPKAPGLKES	SDKVSRVASP	KKKESVEKAA	KPTTTPEVKA	ARGEKDKET	
2321	KNAANASASK	SAKTATAGPG	TTKTTKSSAV	PPGLPVYLDL	CYIPNHSNSK	NVDVEFFKRV	RSSYYVVSGN	DPAAEPSRA	
2401	VLDALLEGKA	QWGSNMQVTL	IPTHDSEVMR	EWYQETHEKQ	QDLNIMVLAS	SSTVVMQDES	FPAACKIEL		

Methylation(others) (+14.02)



Eluted AD

1	MATVVVEATE	PEPSGSIANP	AASTSPSLSH	RFLDSKFYLL	VVVGEIVTEE	HLRRAIGNIE	LGIR	SWDTNL	IECNLDQELK
81	LFVSRHSARF	SPEVPGQKIL	HHRSDVLETV	VLINPSDEAV	STEVRLMITD	AARHKLLVLT	GQCFENTGEL	ILQSGSFSFQ	
161	NFIEIFTDQE	IGELLSTTHP	ANKASLTLCF	PEEGDWKNSN	LDRHNLQDFI	NIKLNASIL	PEMEGLSEFT	EYLSSEVEVP	
241	SPFDILEPPT	SGGFLKLSKP	CCYIFPGGRG	DSALFAVNGF	NMLINGGSSER	KSCFWKLIRH	LDRVDSILLT	HIGDDNLPFI	
321	NSMLQRKIAE	LEEEQSQGST	TNSDWMKNLI	SPDLGVVFLN	VPENLKNPEP	NIKMKRSIEE	ACFTLYLYLNK	LSMKPEPLFR	
401	SVGNTIDPVI	LFQKMGVGL	EMYVLNPVKS	SKEMQYFMQQ	WTGTNKDKAE	FILPNGQEVD	LPISYLTSVS	SLIVWHPANP	
481	AEKIIRVLFP	GNSTQYNILE	GLEKLKHLDF	LKQPLATQKD	LTGQVPTFVV	KQTKLKQRAD	SRESLKPAAK	PLPSKSVRKE	
561	SKEETPEVTK	VNHVEKPPKV	ESKEKVMVKK	DKPIKTETKP	SVTEKEVPSK	EEPSFVKAEV	AEKQATDVKP	KAKEKTVKK	
641	ETKVKPEDKK	EEKEKPKKEV	AKKEDKTIK	KEEKPKKEEV	KKEVKKEIKK	EEKKEPKKEV	KKETPPKEVK	KEVKKEEKKE	
721	VKKEEKEPKK	EIKKLPKDAK	KSSTPLSEAK	KPAALKPKVP	KKEESVKKDS	VAAGKPKKEG	KIKVIKKEGK	AAEAVAAAVG	
801	TGATTAAVMA	AAGIAAIGFA	KELEAERSLM	SSPEDLTADF	EELKAEVDV	TKDIKPQLEL	IEDEEKLKET	EPVEAYVIQK	
881	EREVTKGPAE	SPDEGITTE	GEGECEQTP	ELEPVEKQGV	DDIEKFEDG	AGFEESSETG	DYEEKAETEE	AEEPEEDGEE	
961	HVCVSASKHS	PTEDEESAKA	EADAYIREKR	ESVASGDDRA	EEDMDEAIEK	GEAEQSEEEA	DEEDKAEDAR	EEYEPEKME	
1041	AEDYVMVAVD	KAAEAGGAE	QYGLTTPTK	QLGAQSPGRE	PASSIHDETL	PGGSESEATA	SDEENREDQP	EFTTATSGYT	
1121	QSTIEISSEP	TPMDEMSTPR	DVMSDETNE	ETESPSQEFV	NITKYESSLY	SQEYSKPADV	TPLNGFSEGS	KTDATDGKDY	
1201	NASASTISPP	SMMEEDKFSR	SALRDAYCSE	VKASTTLDIK	DSISAVSSEK	VSPSKSPSL	SPPPSPLEKT	PLGERSVNFS	
1281	LTPNEIKVSA	EAEVAPVSPE	VTQEVVEEHC	ASPEDKTLEV	VSPSQSVTGS	AGHTPYQSP	TDEKSSHLPT	EVIEKPPAVP	
1361	VSFEFSDAKD	ENERASVSPM	DEVPDSESP	IEKVLSPSL	PPLIGSESAY	ESFLSADDKA	SGRGAESPFE	EKSGKQGSFD	
1441	QVSPVSEMTS	TSLYQDKQEG	KSTDFAPIKE	DFGQEKKTDD	VEAMSSQPAL	ALDERKLGVD	SPTQIDVSQF	GSFKEDTKMS	
1521	ISEGTVSDKS	ATPVDEGVAE	DTYSHMEGVA	SVSTASVATS	SFPEPTDDV	SPSLHAEVGS	PHSTEVDDSL	SVSVQVTPTT	
1601	FQETEMSPSK	EECPRPMIS	PPDFSPKTAK	SRTVPQDHR	EQSSMSIEFG	QESPEQSLAM	DFSRQSPDHP	TVGAGVLHIT	
1681	ENGPTVDYS	PSDMQDSSL	HKIPPMEEPS	YTQDNDLSEL	ISVSQVEASP	STSSAHTPSQ	IASPLQEDTL	SDVAPPDRMS	
1761	LYASLTSEKV	QSLEGEKLS	KSDISPLTPR	ESSPLYSPTF	SDSTSAVKEK	TATCHSSSSP	PIDAASAEPY	GFRASVLFD	
1841	MQHHLALNRD	LSTPGLKEDS	GGKTPGDFSY	AYQKPEETTR	SPDEEDYDYE	SYEKTTRTSD	VGGYIEKIE	RTTKSPSDSG	
1921	YSYETIGKTT	KTPEDGDYSY	EIEKTTTRTP	EEGGYSYDIS	EKTTSPEEVS	GYSYEKTERS	RRLDDISNG	YDDSEDGGHT	
2001	LGDPYSYSYET	TEKITSFPES	EGYSYETSTK	TTRTPDTSTY	CYETAEKITR	TPQASTYSYE	TSDLCYTAEK	KSPSEARQDV	
2081	DLCLVSSCEY	KHPKTELS	FINPNLEWF	ASEEPTEESE	KPLTQSGGAP	PPPGGKQQR	QCDETPPTSV	SESAPSQTDS	
2161	DVPPETEEC	SITADANIDS	EDESEITPTD	KTVTYKHMDP	PPAPVQDRSP	SPRHPDVSMV	DPEALAIEQN	LKALKKDLK	
2241	EKTTKTKPGT	KTKSSSPVK	SDGSKPLAA	SPKAPGLKES	SDKVSRVASP	KKKESVEKAA	KPTTTPEVKA	ARGEKDKET	
2321	KNAANASASK	SAKTATAGPG	TTKTTKSSAV	PPGLPVYLDL	CYIPNHSNSK	NVDVEFFKRV	RSSYYVVSGN	DPAAEPSRA	
2401	VLDALLEGKA	QWGSNMQVTL	IPTHDSEVMR	EWYQETHEKQ	QDLNIMVLAS	SSTVVMQDES	FPAACKIEL		

Acetylation (N-term) (+42.01)
Methylation(others) (+14.02)

B

MICROTUBULE ASSOCIATED PROTEIN 2 (MTAP2_HUMAN)

Eluted control

1 MADERKDEAK APHWTSAPLT EASAHSHPPE IKDQGGAGEG LVRSANGFPY REDEEGAFGE HGSQGTYSNT KENGINDELT
81 SADRETAEEV SARIVQVTA EAVAVLKGEQ EKEAQHKDQT AALPLAAEET ANLPPSPPPS PASEQTVTVE EDLLTASKME
161 FHDQQELTPS TAEPSDQKEK ESEKQSKPGE DLKHAALVSQ PETTKTYPDK KDMQGTEEEK APLALFGHTL VASLEDMDKQK
241 TEP²⁰²SLVVPGI DLPK²⁰⁴EPPTPK EQKDWFIEMP TEAKKDEWGL VAPISPGPLT PMREKDVFD IPKWEGKQFD SPMPSPFQGG
321 SFTLPLDVMK NEIVTETSPF APAFLQDDK KSLQOTSGPA TAK²⁰⁵DSFKIEE PHEAKPDKMA EAPPSEAMTL PK²⁰⁶DAHIPVVE
401 EHV²⁰⁷MGKVL EE EKEAINQETV QQRDTFTPSG QEPILTEKET ELKLEEKTTI SDKEAVPKES KPPKPADEEI GIIQTSTEHT
481 FSEQKDQEP TDM²⁰⁸LKQDSFP VSLEQAVTDS AMTSKLEKA MTEPSALIEK SSIQELFEMR VDDDKIEGV GAATS²⁰⁹AELDM
561 PFYEDKSGMS KYFETSALKE EATKSIEPGS DYYELSDTRE SVHESIDTMS PMHKN²¹⁰GDKEF QTGKESQSP PAQEAGYSTL
641 AQSYPSDLPE EPSSPQERMF TIDPKVYGEK RDLH²¹¹SKNKDD LTLRSRLGLG GRSAIEQRSM SINLPMSCLD SIALGFNFGR
721 GH²¹²DLSP²¹³LASD ILTNTSGSMD EGDDYLPATT PALEKAPCFP VESKEEEQIE KVKATGEEST QAEISCESPF LAKDFYKNGT
801 VMAPDLPEML DLAGTRSRLA SVSADAEVAR RK²¹⁴SV²¹⁵PSETVV EDSRTGLPPV T²¹⁶ENHVIVKT DSQLEDLGYC VF²¹⁷NYTVPLP
881 SPVQDSENLS GESGTFYEGT DDKVRRDLAT DLSLIEVKLA AAGRVKDEFS VDKEASAHIS GDKSGLSKEF DQEKKANDRL
961 DTVLEKSEEH ADSKEHAKKT EEAGDEIETF GLGVTYEQAL AKDLSIPTDA SSEKA²¹⁸EGLS SVPEIAEVEP SKKVEQGLDF
1041 AVQGQLDVKI SDFGQMASGL NIDRRATEL KLEATQDMTP SSKAPQEADA FMGVESGHMK EGTKVSETEV KEVAKPDLV
1121 HQEAVDKES YESSGEHESL TMESLKADEG KKETSPESSL IQDEIAVKLS VEIPC²¹⁹PAVS EADLATDERA DVQMEFIQGP
1201 KEESKETPDI SITPSDVAEP LHETIVSEPA EIQSEEEIE AQGEYDKLLF RSDTLQITDL GVS²²⁰GAREEFV ETCPS²²¹EHKGV
1281 IESVVTIEDD FITVVQTTTD EGESGSHSVR FAAL²²²EQPEVE RRPSPHDEEE FEVEEAAEAQ AEPKDG²²³SPEA PASPEREEVA
1361 LSEYKTETYD DYKDETTIDD SIMDADSLWV DTQDDRSIM TEQLETIPKE EKA²²⁴EKEARRS SLEK²²⁵HRKEKP FKTGRGRIST
1441 PERK²²⁶VAKKEP STVSRDEVR KKA²²⁷VYKKAEL AKKTEVQAHS PSRK²²⁸FILKPA IKYTRP²²⁹THLS CVK²³⁰KRKTAAG GESALAPS²³¹VF
1521 KQAKDKVSDG VTKSPEKRSS LPRPSSILPP RRGVSGRDE NSFSLNSSIS SSAR²³²TRTSE PIRAGKSGT STPTTPGSTA
1601 ITPGTPPSYS SRTPGTPGTP SYPRTPHTPG TPKSAILVPS EKKVAIIRTP PKSPATPKQL RLINQPLPDL K²³³NVSKIGST
1681 DN²³⁴IKYQPKGG QVQIVTKKID LSHVTSKCGS LKNIRHRPGG GRVKIESVKL DFKEKAQAKV GSLDNAHHPV GGGNVKIDSQ
1761 KLN²³⁵FREHAKA RVDHGA²³⁶EIIT QSPGRSSVAS PRRLSNVSSS GSINLLESPQ LATLAEDVTA ALAKQGL

M Methylation(others) (+14.02)

M Methylation(KR) (+14.02)

Eluted AD

1 MADERKDEAK APHWTSAPLT EASAHSHPPE IKDQGGAGEG LVRSANGFPY REDEEGAFGE HGSQGTYSNT KENGINDELT
81 SADRETAEEV SARIVQVTA EAVAVLKGEQ EKEAQHKDQT AALPLAAEET ANLPPSPPPS PASEQTVTVE EDLLTASKME
161 FHDQQELTPS TAEPSDQKEK ESEKQSKPGE DLKHAALVSQ PETTKTYPDK KDMQGTEEEK APLALFGHTL VASLEDMDKQK
241 TEP²⁰²SLVVPGI DLPK²⁰⁴EPPTPK EQKDWFIEMP TEAKKDEWGL VAPISPGPLT PMREKDVFD IPKWEGKQFD SPMPSPFQGG
321 SFTLPLDVMK NEIVTETSPF APAFLQDDK KSLQOTSGPA TAK²⁰⁵DSFKIEE PHEAKPDKMA EAPPSEAMTL PK²⁰⁶DAHIPVVE
401 EHV²⁰⁷MGKVL EE EKEAINQETV QQRDTFTPSG QEPILTEKET ELKLEEKTTI SDKEAVPKES KPPKPADEEI GIIQTSTEHT
481 FSEQKDQEP TDM²⁰⁸LKQDSFP VSLEQAVTDS AMTSKLEKA MTEPSALIEK SSIQELFEMR VDDDKIEGV GAATS²⁰⁹AELDM
561 PFYEDKSGMS KYFETSALKE EATKSIEPGS DYYELSDTRE SVHESIDTMS PMHKN²¹⁰GDKEF QTGKESQSP PAQEAGYSTL
641 AQSYPSDLPE EPSSPQERMF TIDPKVYGEK RDLH²¹¹SKNKDD LTLRSRLGLG GRSAIEQRSM SINLPMSCLD SIALGFNFGR
721 GH²¹²DLSP²¹³LASD ILTNTSGSMD EGDDYLPATT PALEKAPCFP VESKEEEQIE KVKATGEEST QAEISCESPF LAKDFYKNGT
801 VMAPDLPEML DLAGTRSRLA SVSADAEVAR RKSVPSETVV EDSRTGLPPV T²¹⁶ENHVIVKT DSQLEDLGYC VF²¹⁷NYTVPLP
881 SPVQDSENLS GESGTFYEGT DDKVRRDLAT DLSLIEVKLA AAGRVKDEFS VDKEASAHIS GDKSGLSKEF DQEKKANDRL
961 DTVLEKSEEH ADSKEHAKKT EEAGDEIETF GLGVTYEQAL AKDLSIPTDA SSEKA²¹⁸EGLS SVPEIAEVEP SKKVEQGLDF
1041 AVQGQLDVKI SDFGQMASGL NIDRRATEL KLEATQDMTP SSKAPQEADA FMGVESGHMK EGTKVSETEV KEVAKPDLV
1121 HQEAVDKES YESSGEHESL TMESLKADEG KKETSPESSL IQDEIAVKLS VEIPC²¹⁹PAVS EADLATDERA DVQMEFIQGP
1201 KEESKETPDI SITPSDVAEP LHETIVSEPA EIQSEEEIE AQGEYDKLLF RSDTLQITDL GVS²²⁰GAREEFV ETCPS²²¹EHKGV
1281 IESVVTIEDD FITVVQTTTD EGESGSHSVR FAAL²²²EQPEVE RRPSPHDEEE FEVEEAAEAQ AEPKDG²²³SPEA PASPEREEVA
1361 LSEYKTETYD DYKDETTIDD SIMDADSLWV DTQDDRSIM TEQLETIPKE EKA²²⁴EKEARRS SLEK²²⁵HRKEKP FKTGRGRIST
1441 PERK²²⁶VAKKEP STVSRDEVR KKA²²⁷VYKKAEL AKKTEVQAHS PSRK²²⁸FILKPA IKYTRP²²⁹THLS CVK²³⁰KRKTAAG GESALAPS²³¹VF
1521 KQAKDKVSDG VTKSPEKRSS LPRPSSILPP RRGVSGRDE NSFSLNSSIS SSAR²³²TRTSE PIRAGKSGT STPTTPGSTA
1601 ITPGTPPSYS SRTPGTPGTP SYPRTPHTPG TPKSAILVPS EKKVAIIRTP PKSPATPKQL RLINQPLPDL K²³³NVSKIGST
1681 DN²³⁴IKYQPKGG QVQIVTKKID LSHVTSKCGS LKNIRHRPGG GRVKIESVKL DFKEKAQAKV GSLDNAHHPV GGGNVKIDSQ
1761 KLN²³⁵FREHAKA RVDHGA²³⁶EIIT QSPGRSSVAS PRRLSNVSSS GSINLLESPQ LATLAEDVTA ALAKQGL

M Methylation(KR) (+14.02)

O Oxidation (M) (+15.99)

C

TAU
(TAU_HUMAN)

Eluted control

1 MAEPRQEFEV MEDHAGTYGL GDRKDQGGYT MHQDQEGDTD AGLKESPLQT PTEDGSEEPG SETSDAKSTP TAEDVTAPLV
81 DEGAPGKQAA AQPHTIEPEG TTAEAGIGD TPSLEDEAAG HVTQEPESGK VVQEGFLREP GPPGLSHQLM SGMPGAPLLP
161 EGPREATRQP SGTGPEDTEG GRHAPELLKH QLLGDLHQEG PPLKGAGGKE RPKSKEEVDE DRDVDESSPQ DSPPSKASPA
241 QDGRPPQTAA REATSIPGFP AEGAIPLPVD FLSKVSTEIP ASEPDGPSVG RAKGQDAPLE FTFHVEITPN VQKEQAHSEE
321 HLGRAAFPGA PEGGPEARGP SLGEDTKEAD LPEPSEKQPA AAPRGKPVSR VPQLKARMVS KSKDGTGSDD KKAKTSTRSS
401 AKTLKNRPCL SPKHPTPGSS DPLIQPSSPA VCEPPSSPK YVSSVTSRTG SSGAKEMKLK GADGKTKIAT PRGAAPPGQK
481 GQANATRIPA KTPPAKPTP SSGEPPKSGD RSSGYSSPGSP GTPGSRSRTP SLPTPPTREP KKVAVVRTPP KSPSSAKSRL
561 QTAPVMPDL KNVKSKIGST ENLKHQPGG KVQIINKLD LSNVQSKCGS KDNKHVPVG GSVQIVYKPV DLSKVTSKCG
641 SLGNIHHKPG GGQVEVKSEK LDFKDRVQSK IGSLDNITHV PGGGNKKIET HKLTFRENAK AKTDHGAEIV YKSPVVS GDT
721 SPRHLSNVSS TGSIDMVDSP QLATLADEV ASLAKQGL

Eluted AD

1 MAEPRQEFEV MEDHAGTYGL GDRKDQGGYT MHQDQEGDTD AGLKESPLQT PTEDGSEEPG SETSDAKSTP TAEDVTAPLV
81 DEGAPGKQAA AQPHTIEPEG TTAEAGIGD TPSLEDEAAG HVTQEPESGK VVQEGFLREP GPPGLSHQLM SGMPGAPLLP
161 EGPREATRQP SGTGPEDTEG GRHAPELLKH QLLGDLHQEG PPLKGAGGKE RPKSKEEVDE DRDVDESSPQ DSPPSKASPA
241 QDGRPPQTAA REATSIPGFP AEGAIPLPVD FLSKVSTEIP ASEPDGPSVG RAKGQDAPLE FTFHVEITPN VQKEQAHSEE
321 HLGRAAFPGA PEGGPEARGP SLGEDTKEAD LPEPSEKQPA AAPRGKPVSR VPQLKARMVS KSKDGTGSDD KKAKTSTRSS
401 AKTLKNRPCL SPKHPTPGSS DPLIQPSSPA VCEPPSSPK YVSSVTSRTG SSGAKEMKLK GADGKTKIAT PRGAAPPGQK
481 GQANATRIPA KTPPAKPTP TPP SSGEPPKSGD RSSGYSSPGSP GTPGSRSRTP SLPTPPTREP KKVAVVRTPP KSPSSAKSRL
561 QTAPVMPDL KNVKSKIGST ENLKHQPGG KVQIINKLD LSNVQSKCGS KDNKHVPVG GSVQIVYKPV DLSKVTSKCG
641 SLGNIHHKPG GGQVEVKSEK LDFKDRVQSK IGSLDNITHV PGGGNKKIET HKLTFRENAK AKTDHGAEIV YKSPVVSGDT
721 SPRHLSNVSS TGSIDMVDSP QLATLADEV ASLAKQGL

 Oxidation (M) (+15.99)

D

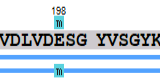
TUBULIN POLYMERIZATION-PROMOTING PROTEIN
(TPPP_HUMAN)

Eluted control

1 MADKAKPAKA ANRTPPKSPG DPSKDRAAKR LSLESEGAGE GAAASPELSA LEEAFRR**FAV HGDAR**ATGRE MHGKNWSKLC
81 KDCQVIDGRN VTVTVDIVF SKIKGKSCRT ITFEQFQEAL EELAKKRFKD KSSEEAVREV HRLIEGKAPI ISGVTKAISS
161 PTVSRLTDTT KFTGSHKERF DSPGKGKGKA GR**VDLVDESG YVSGYK**HAGT YDQKVQGGK

Eluted AD

1 MADKAKPAKA ANRTPPKSPG DPSKDRAAKR LSLESEGAGE GAAASPELSA LEEAFRR**FAV HGDAR**ATGRE MHGKNWSKLC
81 KDCQVIDGRN VTVTVDIVF SKIKGKSCRT ITFEQFQEAL EELAKKRFKD KSSEEAVREV HRLIEGKAPI ISGVTKAISS
161 PTVSRLTDTT KFTGSHKERF DSPGKGKGKA GR**VDLVDESG YVSGYK**HAGT YDQKVQGGK



Methylation(others) (+14.02)