

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

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Supplementary figure 1. Protein coverage of W-Tau peptide-binding proteins shown in Table 1. 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 1) include: Tubulin alpha chain 1B (**A**), Lactate dehydrogenase A (**B**) and B (**C**).

A

TUBULIN ALPHA CHAIN 1B
(TBA1B_HUMAN)

Eluted control

Eluted AD

1 MRECISIHVG QAGVQIGNAC WELYCLEHGI QPDGQMPSDK TIGGGDDSFN TFFSETGAGK HVPR**AVFVDL EPTVIDEVRT**
81 GTYR**QLFHPE QLITGKEDAA NNYAR**GHYTI GK**EIIDLVLD R**IRKLADQCT GLQGFLVFHS FGSGTGSGFT SLLMER**LSVD**
161 **YGKKS**SKLEFS IYPAPQVSTA VVEPYNSILT THTTLEHSDC AFMVDNEAIY DICRR**NLDIE RPTYTNLNL** ISQIVSSITA
241 SLRFDGALNV DLTEFQTNLV PYPR**IHFPLA TYAPVISA**EK AYHEQLSVAE ITNACFEPAN QMVKCDPRHG KYMACCLLYR
321 GDVVPKDVNA AIATIKTKRS IQFVDWCPTG FK**VGINYQPP TVVPGGDLAK** VQRAVCMLSN TTAIAEAWAR LDHK**FDLMYA**
401 **K**RAFVHWYVG EGMEEGEFSE AREDMAALEK DYEEVGVDV EGE GEEGEE Y

 Deamidation (NQ) (+0.98)

1 MRECISIHVG QAGVQIGNAC WELYCLEHGI QPDGQMPSDK TIGGGDDSFN TFFSETGAGK HVPR**AVFVDL EPTVIDEVRT**
81 GTYR**QLFHPE QLITGKEDAA NNYAR**GHYTI GK**EIIDLVLD R**IRKLADQCT GLQGFLVFHS FGSGTGSGFT SLLMER**LSVD**
161 **YGKKS**SKLEFS IYPAPQVSTA VVEPYNSILT THTTLEHSDC AFMVDNEAIY DICRR**NLDIE RPTYTNLNL** ISQIVSSITA
241 SLRFDGALNV DLTEFQTNLV PYPR**IHFPLA TYAPVISA**EK AYHEQLSVAE ITNACFEPAN QMVKCDPRHG KYMACCLLYR
321 GDVVPK**DVNA AIATIK**TKRS IQFVDWCPTG FK**VGINYQPP TVVPGGDLAK** VQRAVCMLSN TTAIAEAWAR LDHK**FDLMYA**
401 **K**RAFVHWYVG EGMEEGEFSE AR**EDMAALEK** DYEEVGVDV EGE GEEGEE Y

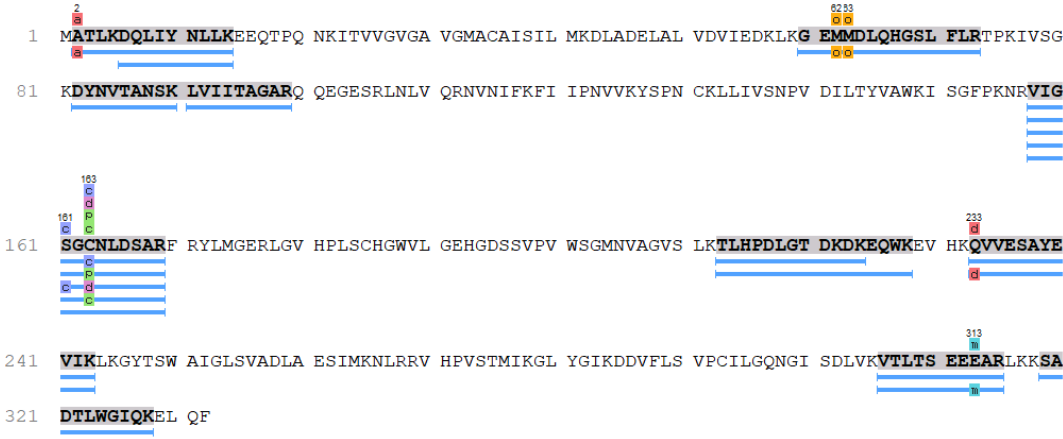
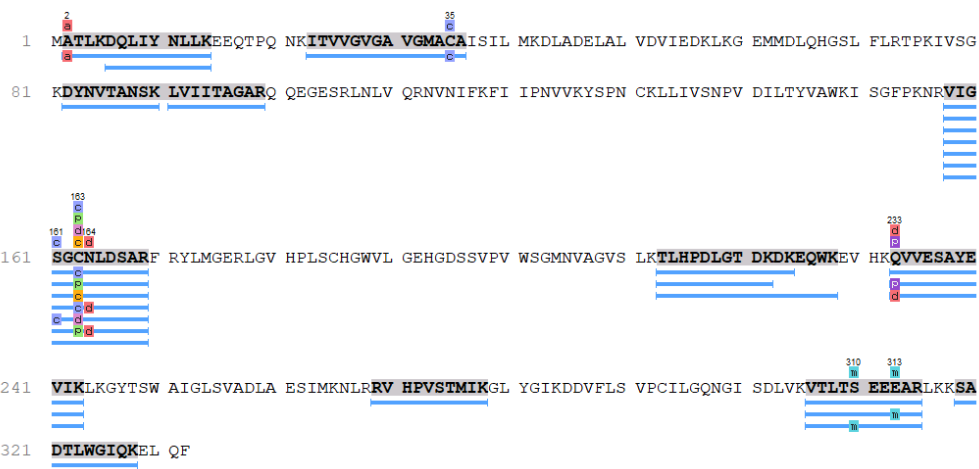
 Deamidation (NQ) (+0.98)
 Deamidation followed by a methylation (+15.00)
 Methylation(others) (+14.02)
 Oxidation (M) (+15.99)

B

LACTATE DESHYDROGENASE A
(LDHA_HUMAN)

Eluted control

Eluted AD



C

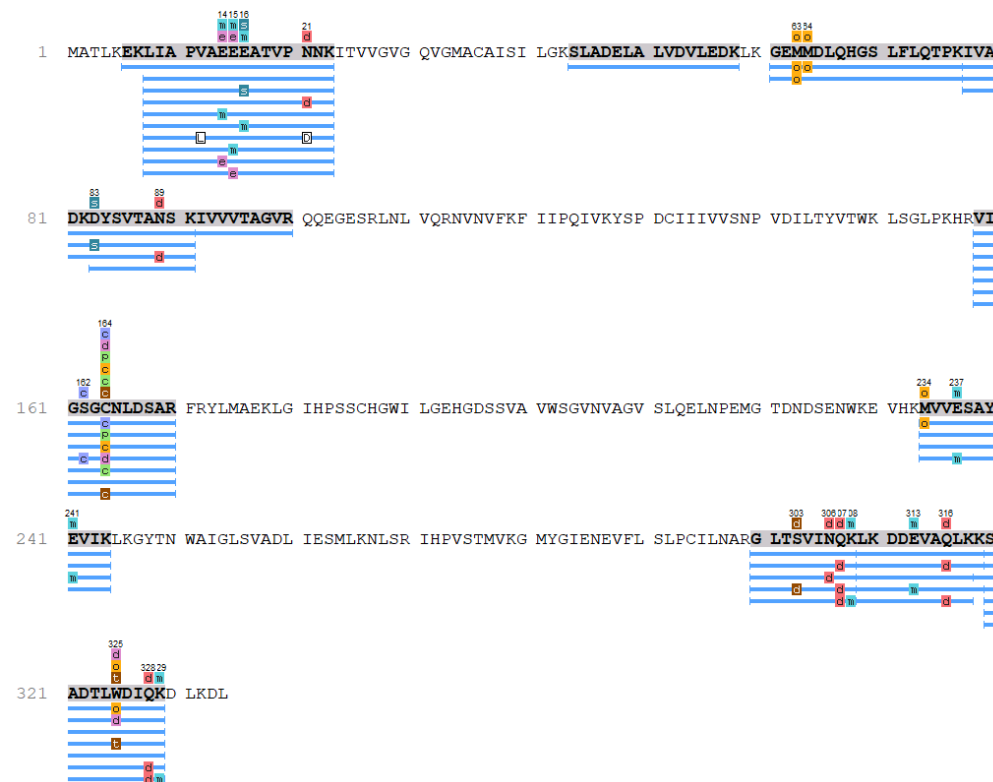
LACTATE DESHYDROGENASE B (LDHB_HUMAN)

Eluted control



- Amidation (-0.98)
- CarbamidomethylTodos (+57.02)
- Cysteine oxidation to cysteic acid (+47.98)
- Carboxymethyl (+58.01)
- Cysteine mercaptoethanol (+76.00)
- Deamidation (NQ) (+0.98)
- Deamidation followed by a methylation (+15.00)
- Dihydroxy (+31.99)
- Ethylation (+28.03)
- Methylation(others) (+14.02)
- Methylation(KR) (+14.02)
- Oxidation (M) (+15.99)
- Oxidation (HW) (+15.99)
- Propionamide (+71.04)
- Sodium adduct (+21.98)
- Sulphone (+31.99)
- Tryptophan oxidation to oxolactone (+13.98)
- Tryptophan oxidation to kynurenin (+3.99)
- N->D
- V->L

Eluted AD



- CarbamidomethylTodos (+57.02)
- Carboxymethyl (+58.01)
- Cysteine oxidation to cysteic acid (+47.98)
- Cysteine mercaptoethanol (+76.00)
- Dihydroxy (+31.99)
- Dehydration (-18.01)
- Deamidation (NQ) (+0.98)
- Ethylation (+28.03)
- Methylation(KR) (+14.02)
- Methylation(others) (+14.02)
- Oxidation (M) (+15.99)
- Oxidation (HW) (+15.99)
- Propionamide (+71.04)
- Sodium adduct (+21.98)
- Tryptophan oxidation to kynurenin (+3.99)
- N->D
- V->L