

1. Linster, E. et al. Cotranslational N-degron masking by acetylation promotes proteome stability in plants. **Nat Commun** 13, 810 (2022).
2. Kišonaitė, M., Wild, K., Lapouge, K., Ruppert, T. & Sinning, I. High-resolution structures of a thermophilic eukaryotic 80S ribosome reveal atomistic details of translocation. **Nat Commun** 13, 476 (2022).
3. Kats, I. et al. Up-regulation of ubiquitin–proteasome activity upon loss of NatA-dependent N-terminal acetylation. **Life Sci Alliance** 5, e202000730 (2022).
4. Winterhalter, P. R., Ruppert, T. & Strahl, S. Identification of Mammalian O-Mannosylated Glycopeptides. **springer** 1–8 (2021) doi:10.1007/978-4-431-54836-2_66-1.
5. Uddin, B. et al. The human phosphatase CDC14A modulates primary cilium length by regulating centrosomal actin nucleation. **Embo Rep** 20, e46544 (2019).
6. Wei, T. et al. YAP-dependent induction of UHMK1 supports nuclear enrichment of the oncogene MYBL2 and proliferation in liver cancer cells. **Oncogene** 1–10 (2019) doi:10.1038/s41388-019-0801-y.
7. Iyer-Bierhoff, A. et al. SIRT7-Dependent Deacetylation of Fibrillarin Controls Histone H2A Methylation and rRNA Synthesis during the Cell Cycle. **Cell Reports** 25, 2946–2954.e5 (2018).
8. Stöcker, S., Maurer, M., Ruppert, T. & Dick, T. P. A role for 2-Cys peroxiredoxins in facilitating cytosolic protein thiol oxidation. **Nat Chem Biol** 14, 148 (2017).
9. Inoue, D. et al. Expression of the novel maternal centrosome assembly factor Wdr8 is required for vertebrate embryonic mitoses. **Nat Commun** 8, 14090 (2017).
10. Chen, N.-P. et al. Human phosphatase CDC14A regulates actin organization through dephosphorylation of epithelial protein lost in neoplasm. **Proc National Acad Sci** 114, 5201–5206 (2017).
11. Ulrich, K. et al. Stress-Induced Protein S-Glutathionylation and S-Trypanothionylation in African Trypanosomes—A Quantitative Redox Proteome and Thiol Analysis. **Antioxidants Amp Redox Signal** 27, 517–533 (2017).
12. Carvalho, S. et al. Preventing E-cadherin aberrant N-glycosylation at Asn-554 improves its critical function in gastric cancer. **Oncogene** 35, 1619–31 (2016).
13. Kurtulmus, B. et al. WDR8 is a centriolar satellite and centriole-associated protein that promotes ciliary vesicle docking during ciliogenesis. **Journal of cell science** 129, 621–36 (2016).
14. Sobotta, M. C. et al. Peroxiredoxin-2 and STAT3 form a redox relay for H₂O₂ signaling. **Nat Chem Biol** 11, 64–70 (2015).
15. Pfeiffer, T., Ruppert, T., Schaal, H. & Bosch, V. Detection and initial characterization of protein entities consisting of the HIV glycoprotein cytoplasmic C-terminal domain alone. **Virology** 441, 85–94 (2013).
16. Winterhalter, P. R., Lommel, M., Ruppert, T. & Strahl, S. O-glycosylation of the non-canonical T-cadherin from rabbit skeletal muscle by single mannose residues. **FEBS letters** 587, 3715–21 (2013).

17. Lommel, M. et al. Protein O-mannosylation is crucial for E-cadherin-mediated cell adhesion. **Proc National Acad Sci** 110, 21024–9 (2013).
18. Colasante, C. et al. Proteins and lipids of glycosomal membranes from *Leishmania tarentolae* and *Trypanosoma brucei*. **F1000Research** 2, 27 (2013).
19. Bärenz, F. et al. The centriolar satellite protein SSX2IP promotes centrosome maturation. **The Journal of cell biology** 202, 81–95 (2013).
20. Fecher-Trost, C. et al. The in Vivo TRPV6 Protein Starts at a Non-AUG Triplet, Decoded as Methionine, Upstream of Canonical Initiation at AUG. **Journal of Biological Chemistry** 288, 16629–16644 (2013).
21. Reinhard, L. et al. S100A9 is a biliary protein marker of disease activity in primary sclerosing cholangitis. **PloS one** 7, e29821 (2012).
22. Dieckmann, R. et al. The Balance in the Delivery of ER Components and the Vacuolar Proton Pump to the Phagosome Depends on Myosin IK in *Dictyostelium*. **Molecular & Cellular Proteomics** 11, 886–900 (2012).
23. Yusenko, M. V., Ruppert, T. & Kovacs, G. Analysis of differentially expressed mitochondrial proteins in chromophobe renal cell carcinomas and renal oncocytomas by 2-D gel electrophoresis. **International journal of biological sciences** 6, 213–24 (2010).
24. Wirtz, M., Heeg, C., Samami, A., Ruppert, T. & Hell, R. Enzymes of cysteine synthesis show extensive and conserved modifications patterns that include N α -terminal acetylation. **Amino Acids** 39, 1077–1086 (2010).
25. Nissen, F. et al. Hot or not—the influence of elevated temperature and microwave irradiation on the solid phase synthesis of an affibody. **Tetrahedron Letters** 51, 6216–6219 (2010).
26. Bender, T., Leidhold, C., Ruppert, T., Franken, S. & Voos, W. The role of protein quality control in mitochondrial protein homeostasis under oxidative stress. **Proteomics** 10, 1426–43 (2010).
27. Schwend, T., Möller, M., Schabacker, J., Ruppert, T. & Wink, M. Alkylation of adenosine deaminase and thioredoxin by acrylamide in human cell cultures. *Zeitschrift für Naturforschung. C*, **Journal of biosciences** 64, 447–53 (2009).
28. Kemmler, S. et al. Mimicking Ndc80 phosphorylation triggers spindle assembly checkpoint signalling. **The EMBO journal** 28, 1099–110 (2009).
29. Boonmee, A., Ruppert, T. & Herrmann, R. The gene mpn310 (hmw2) from *Mycoplasma pneumoniae* encodes two proteins, HMW2 and HMW2-s, which differ in size but use the same reading frame. **FEMS Microbiology Letters** 290, 174–181 (2009).
30. Heeg, C. et al. Analysis of the Arabidopsis O-acetylserine(thiol)lyase gene family demonstrates compartment-specific differences in the regulation of cysteine synthesis. **The Plant cell** 20, 168–85 (2008).
31. Tegha-Dunghu, J. et al. EML3 is a nuclear microtubule-binding protein required for the correct alignment of chromosomes in metaphase. **Journal of cell science** 121, 1718–26 (2008).

32. Kupfahl, C. et al. Gliotoxin production by clinical and environmental *Aspergillus fumigatus* strains. **International journal of medical microbiology** : IJMM 298, 319–27 (2008).
33. Kupfahl, C., Ruppert, T., Dietz, A., Geginat, G. & Hof, H. *Candida* species fail to produce the immunosuppressive secondary metabolite gliotoxin in vitro. **FEMS yeast research** 7, 986–92 (2007).
34. Schlecker, T., Comini, M. A., Melchers, J., Ruppert, T. & Krauth-Siegel, R. Catalytic mechanism of the glutathione peroxidase-type tryparedoxin peroxidase of *Trypanosoma brucei*. **The Biochemical journal** 405, 445–54 (2007).
35. Melchers, J., Dirdjaja, N., Ruppert, T. & Krauth-Siegel, R. L. Glutathionylation of trypanosomal thiol redox proteins. **The Journal of biological chemistry** 282, 8678–94 (2007).
36. Gawliński, P. et al. The *Drosophila* mitotic inhibitor Frühstart specifically binds to the hydrophobic patch of cyclins. **EMBO reports** 8, 490–6 (2007).
37. Schlecker, T., Melchers, J., Ruppert, T., Comini, M. & Krauth-Siegel, L. R. Catalytic mechanism of tryparedoxin peroxidases in african trypanosomes as revealed by site-directed mutagenesis. **GBM Annual Spring meeting Mosbach 2006** 2006, (2006).
38. Colasante, C., Ellis, M., Ruppert, T. & Voncken, F. Comparative proteomics of glycosomes from bloodstream form and procyclic culture form *Trypanosoma brucei*. **Proteomics** 6, 3275–93 (2006).
39. Kupfahl, C. et al. Deletion of the *gliP* gene of *Aspergillus fumigatus* results in loss of gliotoxin production but has no effect on virulence of the fungus in a low-dose mouse infection model. **Molecular microbiology** 62, 292–302 (2006).
40. Melchers, J., Dirdjaja, N., Ruppert, T. & Krauth-Siegel, L. R. Glutathionylation of specific Cysteine residues in thiol redox proteins from *Trypanosoma brucei*. **GBM Annual Spring meeting Mosbach 2006** 2006, (2006).
41. Herrmann, R. & Ruppert, T. Proteome of *Mycoplasma pneumoniae*. **Methods of biochemical analysis** 49, 39–56 (2006).
42. Major, T., Janowsky, B. von, Ruppert, T., Mogk, A. & Voos, W. Proteomic analysis of mitochondrial protein turnover: identification of novel substrate proteins of the matrix protease *pim1*. **Molecular and cellular biology** 26, 762–76 (2006).
43. Gotthardt, D. et al. Proteomics Fingerprinting of Phagosome Maturation and Evidence for the Role of a $G\alpha$ during Uptake. **Molecular & Cellular Proteomics** 5, 2228–2243 (2006).
44. Catrein, I., Herrmann, R., Bosserhoff, A. & Ruppert, T. Experimental proof for a signal peptidase I like activity in *Mycoplasma pneumoniae*, but absence of a gene encoding a conserved bacterial type I SPase. **FEBS Journal** 272, 2892–2900 (2005).
45. Lee, B. et al. Irreversible inactivation of trypanothione reductase by unsaturated Mannich bases: a divinyl ketone as key intermediate. **Journal of medicinal chemistry** 48, 7400–10 (2005).
46. Herrmann, R. & Ruppert, T. Microbial Proteomics: Functional Biology of Whole Organisms. **wiley** 39–56 (2005) doi:10.1002/0471973165.ch4.

47. Seifert, U. et al. Hepatitis C virus mutation affects proteasomal epitope processing. **The Journal of clinical investigation** 114, 250–9 (2004).
48. Schwend, T., Redwanz, I., Ruppert, T., Szenthe, A. & Wink, M. Analysis of proteins in the spent culture medium of *Lupinus albus* by electrospray ionisation tandem mass spectrometry. **Journal of chromatography**. A 1009, 105–10 (2003).
49. Estévez, A. M., Lehner, B., Sanderson, C. M., Ruppert, T. & Clayton, C. The roles of intersubunit interactions in exosome stability. **The Journal of biological chemistry** 278, 34943–51 (2003).
50. Simons, A. et al. Evidence for a copper-binding superfamily of the amyloid precursor protein. **Biochemistry** 41, 9310–20 (2002).
51. Opitz, C. et al. Intramembrane cleavage of microneme proteins at the surface of the apicomplexan parasite *Toxoplasma gondii*. **The EMBO journal** 21, 1577–85 (2002).
52. Kuckelkorn, U. et al. Link between organ-specific antigen processing by 20S proteasomes and CD8(+) T cell-mediated autoimmunity. **The Journal of experimental medicine** 195, 983–90 (2002).
53. Papaioannou, M., Ruppert, T., Dotzlaw, H., Dressel, U. & Baniahmad, A. Protein-protein cross-linking in the use of the eukaryotic eGST-fusion system. **Protein expression and purification** 26, 462–6 (2002).
54. Bubeck, A. et al. The glycoprotein gp48 of murine cytomegalovirusL proteasome-dependent cytosolic dislocation and degradation. **The Journal of biological chemistry** 277, 2216–24 (2002).
55. Stanislawski, T. et al. Circumventing tolerance to a human MDM2-derived tumor antigen by TCR gene transfer. **Nature immunology** 2, 962–70 (2001).
56. Dahlmann, B., Ruppert, T., Kloetzel, P. & Kuehn, L. Subtypes of 20S proteasomes from skeletal muscle. **Biochimie** 83, 295–9 (2001).
57. Knuehl, C. et al. The murine cytomegalovirus pp89 immunodominant H-2Ld epitope is generated and translocated into the endoplasmic reticulum as an 11-mer precursor peptide. **Journal of immunology** (Baltimore, Md. : 1950) 167, 1515–21 (2001).
58. Dahlmann, B., Ruppert, T., Kuehn, L., Merforth, S. & Kloetzel, P. Different proteasome subtypes in a single tissue exhibit different enzymatic properties. **Journal of molecular biology** 303, 643–53 (2000).
59. Sijts, A. et al. Efficient generation of a hepatitis B virus cytotoxic T lymphocyte epitope requires the structural features of immunoproteasomes. **The Journal of experimental medicine** 191, 503–14 (2000).
60. Hengel, H. et al. Macrophages escape inhibition of major histocompatibility complex class I-dependent antigen presentation by cytomegalovirus. **Journal of virology** 74, 7861–8 (2000).
61. Sijts, A. et al. MHC class I antigen processing of an adenovirus CTL epitope is linked to the levels of immunoproteasomes in infected cells. **Journal of immunology** (Baltimore, Md. : 1950) 164, 4500–6 (2000).

62. Hesse, L. et al. THE CYSTEINE-RICH DOMAIN OF THE AMYLOID PRECURSOR PROTEIN (APP) CONTAINS SIX DISULPHIDE BRIDGES IN TWO SUBDOMAINS. **Biochemical Society Transactions** 28, A87–A87 (2000).
63. Multhaup, G. et al. Autoxidation of amyloid precursor protein and formation of reactive oxygen species. **Advances in experimental medicine and biology** 448, 183–92 (1999).
64. Multhaup, G. et al. Copper Transport and Its Disorders. **springer** 448, 183–192 (1999).
65. Multhaup, G. et al. Copper-binding amyloid precursor protein undergoes a site-specific fragmentation in the reduction of hydrogen peroxide. **Biochemistry** 37, 7224–30 (1998).
66. Schmidtke, G. et al. Inactivation of a defined active site in the mouse 20S proteasome complex enhances major histocompatibility complex class I antigen presentation of a murine cytomegalovirus protein. **The Journal of experimental medicine** 187, 1641–6 (1998).
67. Dick, T. P. et al. The making of the dominant MHC class I ligand SYFPEITHI. **European Journal of Immunology** 28, 2478–2486 (1998).
68. Theobald, M. et al. The sequence alteration associated with a mutational hotspot in p53 protects cells from lysis by cytotoxic T lymphocytes specific for a flanking peptide epitope. **The Journal of experimental medicine** 188, 1017–28 (1998).
69. Geginat, G., Ruppert, T., Hengel, H., Holtappels, R. & Koszinowski, U. IFN-gamma is a prerequisite for optimal antigen processing of viral peptides in vivo. **Journal of immunology (Baltimore, Md. : 1950)** 158, 3303–10 (1997).
70. Multhaup, G. et al. Reactive oxygen species and Alzheimer's disease. **Biochemical pharmacology** 54, 533–9 (1997).
71. Multhaup, G. et al. 619 Reduction of copper(II) to copper(I) by the Amyloid Precursor Protein (APP) of Alzheimer's disease. **Neurobiology of Aging** 17, S154 (1996).
72. Ossendorp, F. et al. A single residue exchange within a viral CTL epitope alters proteasome-mediated degradation resulting in lack of antigen presentation. **Immunity** 5, 115–24 (1996).
73. Dick, T. et al. Coordinated dual cleavages induced by the proteasome regulator PA28 lead to dominant MHC ligands. **Cell** 86, 253–62 (1996).
74. Multhaup, G. et al. The amyloid precursor protein of Alzheimer's disease in the reduction of copper(II) to copper(I). **Science (New York, N.Y.)** 271, 1406–9 (1996).
75. Eggers, M., Boes-Fabian, B., Ruppert, T., Kloetzel, P. & Koszinowski, U. The cleavage preference of the proteasome governs the yield of antigenic peptides. **The Journal of experimental medicine** 182, 1865–70 (1995).
76. Groettrup, M. et al. The interferon-gamma-inducible 11 S regulator (PA28) and the LMP2/LMP7 subunits govern the peptide production by the 20 S proteasome in vitro. **The Journal of biological chemistry** 270, 23808–15 (1995).
77. Schoel, B., Zügel, U., Ruppert, T. & Kaufmann, S. Elongated peptides, not the predicted nonapeptide stimulate a major histocompatibility complex class I-restricted cytotoxic

T lymphocyte clone with specificity for a bacterial heat shock protein. ***European journal of immunology*** 24, 3161–9 (1994).

78. Boes, B. *et al.* Interferon gamma stimulation modulates the proteolytic activity and cleavage site preference of 20S mouse proteasomes. ***The Journal of experimental medicine*** 179, 901–9 (1994).
79. Hengel, H., Lucin, P., Jonjić, S., Ruppert, T. & Koszinowski, U. Restoration of cytomegalovirus antigen presentation by gamma interferon combats viral escape. ***Journal of virology*** 68, 289–97 (1994).
80. Val, M. del *et al.* Cytomegalovirus prevents antigen presentation by blocking the transport of peptide-loaded major histocompatibility complex class I molecules into the medial-Golgi compartment. ***The Journal of experimental medicine*** 176, 729–38 (1992).
81. Val, D. M., Schlicht, H., Ruppert, T., Reddehase, M. & Koszinowski, U. Efficient processing of an antigenic sequence for presentation by MHC class I molecules depends on its neighboring residues in the protein. ***Cell*** 66, 1145–53 (1991).