Supplementary Figure 1. Identification of Emerin (Emd) as N-glycoprotein.

(a) N-Glycopeptide LIYGQDSAYQSIAHYRPISNVSR (Emd) with the glycan composition HexNAc2.Hex10 was identified with high confidence via MS/MS. (b) Analysis of the corresponding PNGaseF-treated HILIC fraction identified the non-glycosylated peptide LIYGQDSAYQSIAHYRPISNVSR bearing the enzymatically induced deamidation of formerly N-glycosylated asparagine residues at position 20. Of note, in the context of the amino-acid sequence, asparagine 20 is part of a potential N-glycosylation sequence-motive.
Supplementary Figure 2. Identification of Nuclear protein 56 (Nop56) as N-glycoprotein.

(a) N-Glycopeptide FSEEPEVAANFTK (Nop56) with the glycan composition HexNac2.Hex6 was identified with high confidence via MS/MS. (b) MS/MS data analysis of the corresponding PNGaseF-treated HILIC fraction identified the non-glycosylated peptide FSEEPEVAANFTK bearing the enzymatically induced deamidation of formerly N-glycosylated asparagine residues at position 10. Of note, in the context of the amino-acid sequence, asparagine 10 is part of a potential N-glycosylation sequence-motive.
Supplementary Figure 3. Identification of Lamina-associated polypeptide 2 (Tmpo) as N-glycoprotein.

(a) N-Glycopeptide ASSNESLVANR (Tmpo) with the glycan composition HexNAc2.Hex11 was identified with high confidence via MS/MS. (b) MS/MS data analysis of the corresponding PNGaseF-treated HILIC fraction identified the non-glycosylated peptide ASSNESLVANR bearing the enzymatically induced deamidation of formerly N-glycosylated asparagine residues at position 4. Of note, in the context of the amino-acid sequence, asparagine 4 is part of a potential N-glycosylation sequence-motive.
Supplementary Figure 4. Identification of RAD51-associated protein 1 (Rad51ap1) as N-glycoprotein.

(a) N-Glycopeptide NSSNASLAGTPAK (Rad51ap1) with the glycan composition HexNAc2.Hex11 was identified with high confidence via MS/MS. (b) MS/MS data analysis of the corresponding PNGaseF-treated HILIC fraction identified the non-glycosylated peptide NSSNASLAGTPAK bearing the enzymatically induced deamidation of formerly N-glycosylated asparagine residues at position 1. Of note, in the context of the amino-acid sequence, asparagine 1 is part of a potential N-glycosylation sequence-motive.
Supplementary Figure 5. Identification of Smg7 as N-glycoprotein.

(a) N-Glycopeptide NLTTSSK (Smg7) with the glycan composition HexNAc2.Hex12 was identified with high confidence via MS/MS.

(b) MS/MS data analysis of the corresponding PNGaseF-treated HILIC fraction identified the non-glycosylated peptide NLTTSSK bearing the enzymatically induced deamidation of formerly N-glycosylated asparagine residues at position 1. Of note, in the context of the amino-acid sequence, asparagine 1 is part of a potential N-glycosylation sequence-motive.
Supplementary Figure 6. Identification of the 60S ribosomal protein L34 (Rpl34) as N-glycoprotein.

(a) N-Glycopeptide LSYNTASNK (Rpl34) with the glycan composition HexNAc2.Hex12 was identified with high confidence via MS/MS. (b) MS/MS data analysis of the corresponding PNGaseF-treated HILIC fraction identified the non-glycosylated peptide LSYNTASNK bearing the enzymatically induced deamidation of formerly N-glycosylated asparagine residues at position 8. Of note, in the context of the amino-acid sequence, asparagine 8 is part of a potential N-glycosylation sequence-motive.
Supplementary Figure 7. Identification of Mitogen-activated protein kinase kinase kinase kinase 4 (M4K4) as N-glycoprotein.

(a) The N-Glycopeptide NSTSSIEPR (M4K4) with the glycan composition HexNAc2.Hex12 was identified with high confidence via MS/MS. (b) Analysis of the corresponding PNGaseF-treated HILIC fraction identified the non-glycosylated peptide NSTSSIEPR bearing the enzymatically induced deamidation of formerly N-glycosylated asparagine residues at position 1. Of note, in the context of the amino-acid sequence, asparagine 1 is part of a potential N-glycosylation sequence-motive.
Supplementary Figure 8. Identification of pre-B-cell leukemia transcription factor-interacting protein 1 (Pbxip1) as N-glycoprotein.

(a) N-Glycopeptide SPNDSEAWHQK (Pbxip1) with the glycan composition HexNAc2.Hex8 was identified with high confidence via MS/MS. (b) MS/MS data analysis of the corresponding PNGaseF-treated HILIC fraction identified the non-glicosylated peptide SPNDSEAWHQK bearing the enzymatically induced deamidation of formerly N-glicosylated asparagine residues at position 3. Of note, asparagine 3 is part of a potential N-glycosylation sequence-motive.