Identification of deamidated peptides in cytokineexposed MIN6 cells through LC-MS/MS using a shortened digestion time and inspection of MS2 spectra

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Figure S1: Unique proteins and average protein coverage under various digestion conditions.

Table S1: Amount and fraction of total unique peptides of identified Asn and Gln deamidations under various digestion conditions (excel).

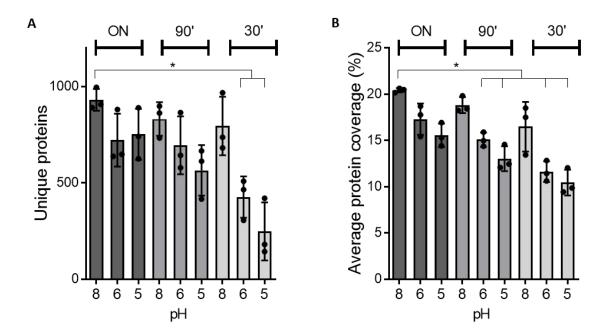
Table S2: Amount and fraction of total unique peptides of identified in vitro and in vivo Asn and Gln deamidations (excel).

Table S3: Confirmed Gln deamidations in control and cytokine-exposed MIN6 cells (excel).

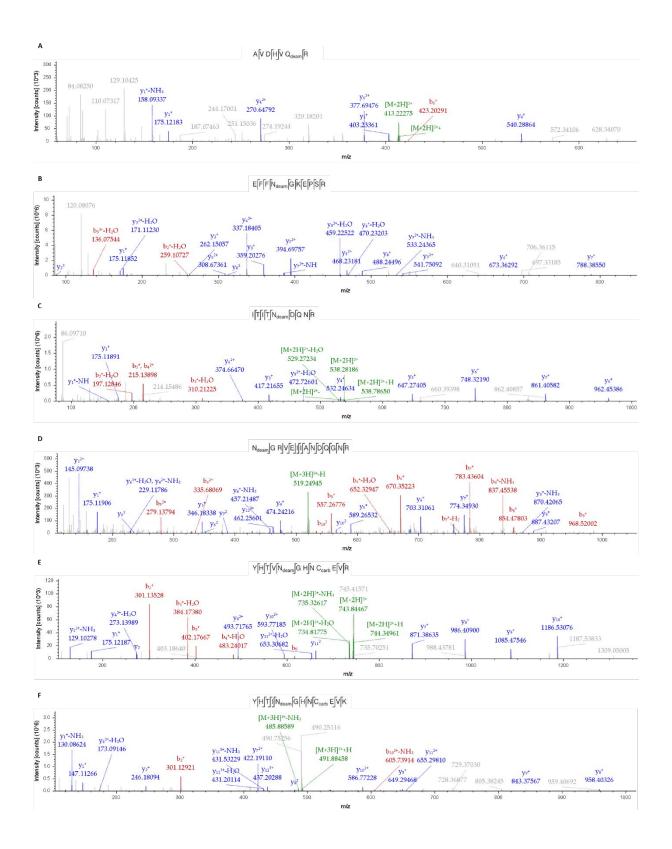
Table S4: Confirmed Asn deamidations in control and cytokine-exposed MIN6 cells (excel).

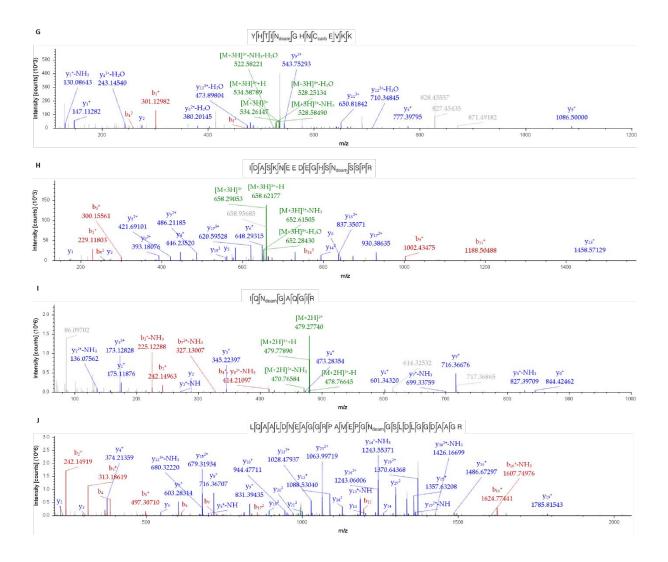
Table S5: Summary table of properties of confirmed Asn and Gln deamidations in control and cytokine-exposed MIN6 cells (excel).

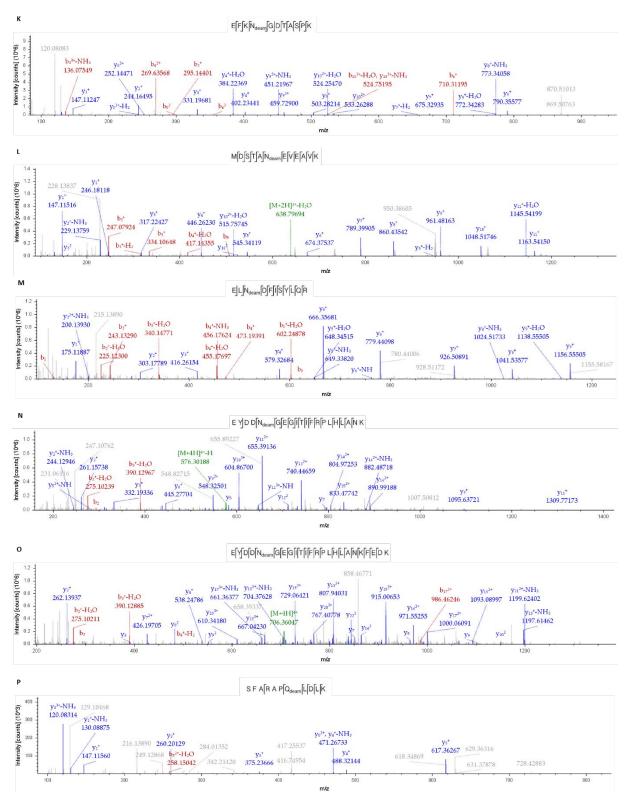
Figure S2: MS2 spectra of peptides with increased deamidation upon cytokineexposure.



**Supplementary Figure 1.** Unique proteins and average protein coverage under various digestion conditions. Total number of proteins identified **(A)** and average protein coverage of identified proteins **(B)** after digestion at different pH's (8, 6 and 5) and during different times (overnight (ON), 90 min and 30'). Results are shown as mean ± SD, n=3 independent experiments. One-way ANOVA with Dunnett's correction for multiple comparisons, \*p<0.05.







Supplementary Figure 2. MS2 spectra of peptides with increased deamidation upon cytokine-exposure. MS2 spectrum of Tetraspanin-7 Q145 (A), GRP78 N48 (B), N381 (C) and N529 (D), hnRNPA1 N171 (E), hnRNPA3 (N192) (F-G), hnRNPD0 N73 (H),

hnRNPH N38 (I), hnRNPU N57 (J), PDI N109 (K) and N451 (L), PDIA3 N199 (M) and N474 (N-O) and Secretogranin-1 Q594 (P).