

Table S1. Cathepsin-like protease amino acid sequences (peptides) used for specific antibody production.

Barley proteases	Peptides
HvPap-1	SGFAPSRFKEKPYWIIKN
HvPap-6	IDSEEDYPYKERDNRC
HvPap-19	CQEKKHFSIDAYQVNSDPHD

Table S2. Primer sequences used for the amplification of barley genes by RT-qPCR assays. *HvCycl* gene (cyclophilin), *HvPap-1* gene (cathepsin F-like protease) *HvPap-6* gene (cathepsin L-like protease), *HvPap-12* gene (cathepsin H-like protease), autophagy related genes *HvATG5* and *HvATG6*.

Barley genes	Primers sequence	
	Forward	Reverse
<i>HvCycl</i>	TCCACCGGAGAGGAAGTACAGT	AATGTGCTCAGAGATGCAAGGA
<i>HvPap-1</i>	TCCTGGAGTCGATCTTTGGTTTC	CAAGCATACTGTTGCGGCTTC
<i>HvPap-6</i>	TGCAATTGACGGCAAGAAGA	TGGATCACCAGGTGATCATTG
<i>HvPap-12</i>	ATGTGCGCTATTGCTACCTGC	CACCTTATTCATGTCTGGCGAA
<i>HvATG5</i>	TGGGAATCAGTGAGGAAAGG	CCAGGAGATTCAGGCTCATC
<i>HvATG6</i>	TGGTTTCTCACTTGCCTTCA	AGCCTTTGTCCAGTTCTCCA