**Supplementary Information**

*Supplementary sequences*

The amino acid sequence of mCherry-TEV_cleavage_site-RRRG:

MVSKGEEDNMAIIKEFMRFKVHMEGSVNGHEFEIEGEGEGRPYEGTQTAKLKVTKGG-
PLPFAWDILSPQFMYGSKAYVKHPADIPDYLKLSFPEGFKWERVMNFEDGGVVTVTQDSSLQDGEFIYKVKLRGTNFPSDGPV
MQKKTMGWEASSERMYPEDGALKGEIKQRLKLKDGGHYDAEVKTTYKAKKPVQLPGAYNVNI-
KLDITSHNEDYTIVEQYERAEGRHSTGGMDELYKENLYFQSRRRG*

The amino acid sequence of mCherry-caspase3_cleavage_site-RRRG:

MVSKGEEDNMAIIKEFMRFKVHMEGSVNGHEFEIEGEGEGRPYEGTQTAKLKVTKGG-
PLPFAWDILSPQFMYGSKAYVKHPADIPDYLKLSFPEGFKWERVMNFEDGGVVTVTQDSSLQDGEFIYKVKLRGTNFPSDGPV
MQKKTMGWEASSERMYPEDGALKGEIKQRLKLKDGGHYDAEVKTTYKAKKPVQLPGAYNVNI-
KLDITSHNEDYTIVEQYERAEGRHSTGGMDELYKGDEVDGRRRG*