



Figure S1: Comparison of fluorescence signal released from negative (with no β -xylosidase activity) and positive control (with high β -xylosidase activity).

MTLSVLTASLVATALGSKVSVVDASSKLGPWTPIHQYYGCDEPNYAYYPHGSAL
LKELGSLGKAQTYFRTHNLLTGQPGLVGVPGWKWGSTNATLDENGMPVYNFTIV
DEIFDHYLANNVKPFLEIGFMPEALAVDPDPYFFDFDPAAGPDNIYTGWTHPPKSYER
WGKLIYEFTKHLVDRYGAKEVNQWPFEVWNEPNIPYWNGTTAEYYKLYDYTVRSV
LEALPTAHIGGPAVAGGASGSYLGDFLEHCSQGTNYATGEKGVPLLISFHAKGVPQ
FINTTDTPGSSGYLQM**D**MSPQLQQIDEAFEVITSFHQYKQKPVFMSEYDPDGCAACTS
AAYDYRNGL**M**YGAYSAASFARAIDLAANRSVNLQAALTWAFEYEKNAILPNETGYF
DGFRVLSTQGIDKPVLFNHRMWSMLSGDRIKAESSAQIPIQEVLNSGIHGAQTDVGSL
ATLTEDGRALYVFLWHYHDNDLSFPDAQVSIDIEGLPAHFAEAKLTHYRVDNKHSNS
YAKWLSMGSPQSPTAEQYNELVAAGKLTLGSPTSMHAHKGRLSTDLSLPIQALSLL
VFTAL

Figure S2: Amino acid sequence of PpBXL. The six identified peptides are marked with underline.