S7 Appendix.

Sequences of protein constructs

Functional core SA subunit with an N-terminal His-tag (green) and a unique cysteine (cyan):

MGSSHHHHHHHMCGSEAGITGTWYNQLGSTFIVTAGADGALTGTYESAVGNAESRY
VLTGRYDSAPATDGSGTALGWTVAWKNNYRNAHSATTWSGQYVGGAEARINTQW
LLTSGTTEANAWKSTLVGHDTFTKVKPSAAS

Functional core SA subunit:

MEAGITGTWYNQLGSTFIVTAGADGALTGTYESAVGNAESRYVLTGRYDSAPATDG
SGTALGWTVAWKNNYRNAHSATTWSGQYVGGAEARINTQWLLTSGTTEANAWKS
TLVGHDTFTKVKPSAAS

Non-functional core SA subunit with three mutations (red; N23A, S27D, S45A):

MEAGITGTWYAQLGDTFIVTAGADGALTGTYEAAVGNAESRYVLTGRYDSAPATDG
SGTALGWTVAWKNNYRNAHSATTWSGQYVGGAEARINTQWLLTSGTTEANAWKS
TLVGHDTFTKVKPSAAS

YbbR-tagged (magenta) ddFLN4 construct with N-terminal His-tag (green) and C-terminal cysteine (cyan). A cysteine that could potentially be accessible for binding to maleimide was mutated to serine (red; C18S):

MDSLEFIASKLAHHHHHHGSADPEKSYAEGPGLDGGESFQPSKFKIHAVDPDGVHRT
DGGDGFVVTIEGPAPVDPVMVDNGDGTYDVEFEPKEAGDYVINLTLDGDNVNGFPK
TVTVKPAPGSC

YbbR-tagged (yellow) superfolder GFP construct with N-terminal His-tag (green) and cysteine (cyan) for tethering. A cysteine that could potentially be accessible for binding to maleimide was mutated to serine (red; C48S):

MGSSHHHHHHLEVLFQGPGHMCGSGSMSKGEELFTGVVPILVELDGDVNGHKFSVR
GEGEGDATIGKLTLKFISTTGKLPVPWPTLVTTLTYGVQCFSRYPDHMKRHDFFKSA
MPEGYVQERTISFKDDGKYKTRAVVKFEGDTLVNRIELKGTDFKEDGNILGHKLEYN
FNSHNVYITADKQKNGIKANFTVRHNVEDGSVQLADHYQQNTPIGDGPVLLPDNHY
LSTQTVLSKDPNEKRDHMVLHEYVNAAGITHGMDELYKSGSGSASDSLEFIASKLA