**Supporting Table 1. Secondary structure assignment for EGFP and wt GFP.**

|  |  |
| --- | --- |
| EGFP | wt GFPa |
| Residue Rangeb | Secondary structurec | Residue Rangeb | Secondary Structurec |
| E5 - F8 | 310 helix | E5 - F8 | 310 helix |
| V12 -V22 | β strand | V12 - V22 | β strand |
| H25 - D36 | β strand | H25 - D36 | β strand |
| A37 - Y39 | 310 helix | - | - |
| K41 - C48 | β strand | K41 - C48 | β strand |
| P56 - L60 | 310 helix | P56 - L60 | 310 helix |
| Q69 - F71 | 310 helix | Q69 - F71 | 310 helix |
| D76 - H81 | 310 helix | D76 - H81 | 310 helix |
| F83 - F86 | α helix | F83 - S86 | α helix |
| Y92 - F100 | β strand | Y92 - F100 | β strand |
| N105-E115 | β strand | N105-E115 | β strand |
| T118 - I128 | β strand | T118 - I128 | β strand |
| N149 - D155 | β strand | H148 - D155 | β strand |
| K156 - K158 | 310 helix | K156 - K158 | 310 helix |
| G160 - E170 | β strand | G160 - E170 | β strand |
| V176 - P187 | β strand | V176 - P187 | β strand |
| H199 - S208 | β strand | H199 - S208 | β strand |
| H217 - A227 | β strand | H217 - A227 | β strand |

 a wt GFP PDB: 1GFL [[2](#_ENREF_2)]
b Residue numbering as for wt GFP [[2](#_ENREF_2)]
c Secondary structure assignment performed by DSSP