

SUPPORTING INFORMATION

Evaluation of *de novo*-designed coiled-coils as off-the-shelf components for protein assembly

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Protein sequences for the constructs described in the main text.

Coiled-coil domain is indicated in red, the glycine spacer sequence is indicated in blue.

Wildtype GFP

MHHHHHHSSGVDLGTENLYFQSNIGSGLLASKGEELFTGVVPILVELDGDVNGHKFSVSG
EGEGDATYGKLTCLKFICTTGKLPVPWPTLVTTLCYGVQCFSRYPDHMKRHDFFKSAMPEG
YVQERTIFFKDDGNYKTRAEVKFEGDTLVNRIELKGIDFKEDGNILGHKLEYNYNNSHNVY
IMADKQKNGIKVNFKTRHNIEDGSVQLADHYQQNTPIGDGPVLLPDNHYLSTQSALS KDP
NEKRDHMLLEFVTAAGITHGMDELYN

Construct 1

MHHHHHHSSGVDLGTENLYFQSNIGSGLLASKGEELFTGVVPILVELDGDVNGHKFSVSG
EGEGDATYGKLTCLKFICTTGKLPVPWPTLVTTLCYGVQCFSRYPDHMKRHDFFKSAMPEG
YVQERTIFFKDDGNYKTRAEVKFEGDTLVNRIELKGIDFKEDGNILGHKLEYNYNNSHNVY
IMADKQKNGIKVNFKTRHNIEDGSVQLADHYQQNTPIGDGPVLLPDNHYLSTQSALS KDP
NEKRDHMLLEFVTAAGITGGGGGGEIAALKQEIAALKQEIAANKQEIAALKQ

Construct 2

MHHHHHHSSGVDLGTENLYFQSNIGSGLLASKGEELFTGVVPILVELDGDVNGHKFSVSG
EGEGDATYGKLTCLKFICTTGKLPVPWPTLVTTLCYGVQCFSRYPDHMKRHDFFKSAMPEG
YVQERTIFFKDDGNYKTRAEVKFEGDTLVNRIELKGIDFKEDGNILGHKLEYNYNNSHNVY
IMADKQKNGIKVNFKTRHNIEDGSVQLADHYQQNTPIGDGPVLLPDNHYLSTQSALS KDP
NEKRDHMLLEFVTAAGITGGGGGGEIAALKQEIAALKQEIAALKQEIAALKQ

Construct 3

MHHHHHHSSGVDLGTENLYFQSNIGSGLLASKGEELFTGVVPILVELDGDVNGHKFSVSG
EGEGDATYGKLTCLKFICTTGKLPVPWPTLVTTLCYGVQCFSRYPDHMKRHDFFKSAMPEG
YVQERTIFFKDDGNYKTRAEVKFEGDTLVNRIELKGIDFKEDGNILGHKLEYNYNNSHNVY
IMADKQKNGIKVNFKTRHNIEDGSVQLADHYQQNTPIGDGPVLLPDNHYLSTQSALS KDP
NEKRDHMLLEFVTAAGITGGGGGGEIAAIKQEIAAIKQEIAAIKQEIAAIKQ

Construct 4

MHHHHHHSSGVDLGTENLYFQSNIGSGLLASKGEELFTGVVPILVELDGDVNGHKFSVSG
EGEGDATYGKLTCLKFICTTGKLPVPWPTLVTTLCYGVQCFSRYPDHMKRHDFFKSAMPEG
YVQERTIFFKDDGNYKTRAEVKFEGDTLVNRIELKGIDFKEDGNILGHKLEYNYNNSHNVY
IMADKQKNGIKVNFKTRHNIEDGSVQLADHYQQNTPIGDGPVLLPDNHYLSTQSALS KDP
NEKRDHMLLEFVTAAGITGGGGGGEIAAIKQELAAIKQELAAIKQELAAIKQ

Construct 5

MHHHHHHSSGVDLGTENLYFQSNIGSGLLASKGEELFTGVVPILVELDGDVNGHKFSVSG
EGEGDATYGKLTCLKFICTTGKLPVPWPTLVTTLCYGVQCFSRYPDHMKRHDFFKSAMPEG
YVQERTIFFKDDGNYKTRAEVKFEGDTLVNRIELKGIDFKEDGNILGHKLEYNYN SHNVY
IMADKQKNGIKVNFKTRHNIEDGSVQLADHYQQNTPIGDGPVLLPDNHYLSTQSALS KDP
NEKRDHMLLEFVTAAGITGGGGGGKIEQILQKIEKILQKIEWILQKIEQILQ

Construct 6

MHHHHHHSSGVDLGTENLYFQSNIGSGLLASKGEELFTGVVPILVELDGDVNGHKFSVSG
EGEGDATYGKLTCLKFICTTGKLPVPWPTLVTTLCYGVQCFSRYPDHMKRHDFFKSAMPEG
YVQERTIFFKDDGNYKTRAEVKFEGDTLVNRIELKGIDFKEDGNILGHKLEYNYN SHNVY
IMADKQKNGIKVNFKTRHNIEDGSVQLADHYQQNTPIGDGPVLLPDNHYLSTQSALS KDP
NEKRDHMLLEFVTAAGITGGGGGGGGKIEQILQKIEKILQKIEWILQKIEQILQ

Construct 7

MHHHHHHSSGVDLGTENLYFQSNIGSGLLASKGEELFTGVVPILVELDGDVNGHKFSVSG
EGEGDATYGKLTCLKFICTTGKLPVPWPTLVTTLCYGVQCFSRYPDHMKRHDFFKSAMPEG
YVQERTIFFKDDGNYKTRAEVKFEGDTLVNRIELKGIDFKEDGNILGHKLEYNYN SHNVY
IMADKQKNGIKVNFKTRHNIEDGSVQLADHYQQNTPIGDGPVLLPDNHYLSTQSALS KDP
NEKRDHMLLEFVTAAGITGGGGGGGGKIEQILQKIEKILQKIENILQKIEQILQ

Construct 8

MHHHHHHSSGVDHIAAIKQEIAAIKQEIAAIKQEIAAIKQEGGGGGTENLYFQSNIGSG
LLASKGEELFTGVVPILVELDGDVNGHKFSVSGEGEGDATYGKLTCLKFICTTGKLPVPWP
TLVTTLCYGVQCFSRYPDHMKRHDFFKSAMPEGYVQERTIFFKDDGNYKTRAEVKFEGDT
LVNRIELKGIDFKEDGNILGHKLEYNYN SHNVYIMADKQKNGIKVNFKTRHNIEDGSVQL
ADHYQQNTPIGDGPVLLPDNHYLSTQSALS KDPNEKRDHMLLEFVTAAGITHGMDELYN

Construct 9

MHHHHHHSSGVDHIAAIKQEIAAIKQEIAAIKQEIAAIKQEGGGGGTENLYF
QSNIGSGLLASKGEELFTGVVPILVELDGDVNGHKFSVSGEGEGDATYGKLTCLKFICTTG
KLPVPWPTLVTTLCYGVQCFSRYPDHMKRHDFFKSAMPEGYVQERTIFFKDDGNYKTRAE
VKFEGDTLVNRIELKGIDFKEDGNILGHKLEYNYN SHNVYIMADKQKNGIKVNFKTRHNI
EDGSVQLADHYQQNTPIGDGPVLLPDNHYLSTQSALS KDPNEKRDHMLLEFVTAAGITH
GMDELYN

Construct 10:

MHHHHHHSSGVDLGTENLYFQSNIGSGLLASKGEELFTGVVPILVELDGDVNGHKFSVSG
EGEGDATYGKLTCLKFICTTGKLPVPWPTLVTTLCYGVQCFSRYPDHMKRHDFFKSAMPEG
YVQERTIFFKDDGNYKTRAEVKFEGDTLVNRIELKGIDFKEDGNILGHKLEYNYN SHNVY
IMADKQKNGIKVNFKTRHNIEDGSVQLADHYQQNTPIGDGPVLLPDNHYLSTQSALS KDP
NEKRDHMLLEFVTAAGITGGGGGELAAIKQELAAIKQELAAIKQELAAIKQ

Construct 11

MHHHHHHSSGVDLGTENLYFQSNIGSGLLASKGEELFTGVVPILVELDGDVNGHKFSVSG
EGEGDATYGKLTCLKFICTTGKLPVPWPTLVTTLCYGVQCFSRYPDHMKRHDFFKSAMPEG
YVQERTIFFKDDGNYKTRAEVKFEGDTLVNRIELKGIDFKEDGNILGHKLEYNYN SHNVY
IMADKQKNGIKVNFKTRHNIEDGSVQLADHYQQNTPIGDGPVLLPDNHYLSTQSALS KDP
NEKRDHMLLEFVTAAGITGGGGGGGELAAIKQELAAIKQELAAIKQELAAIKQ