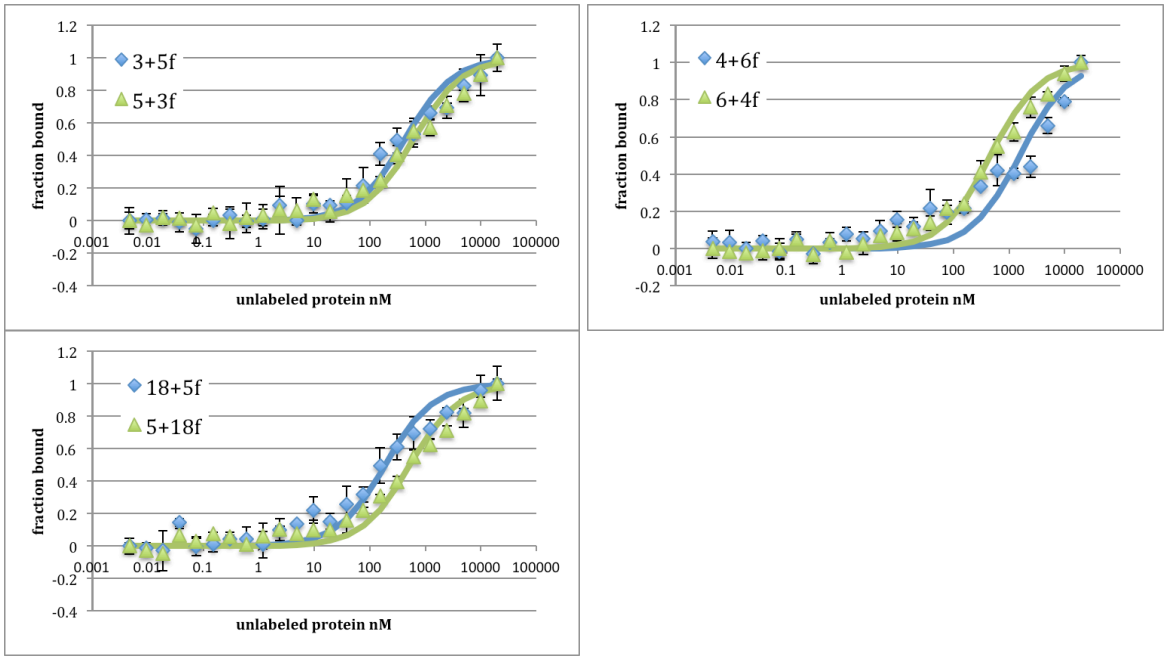
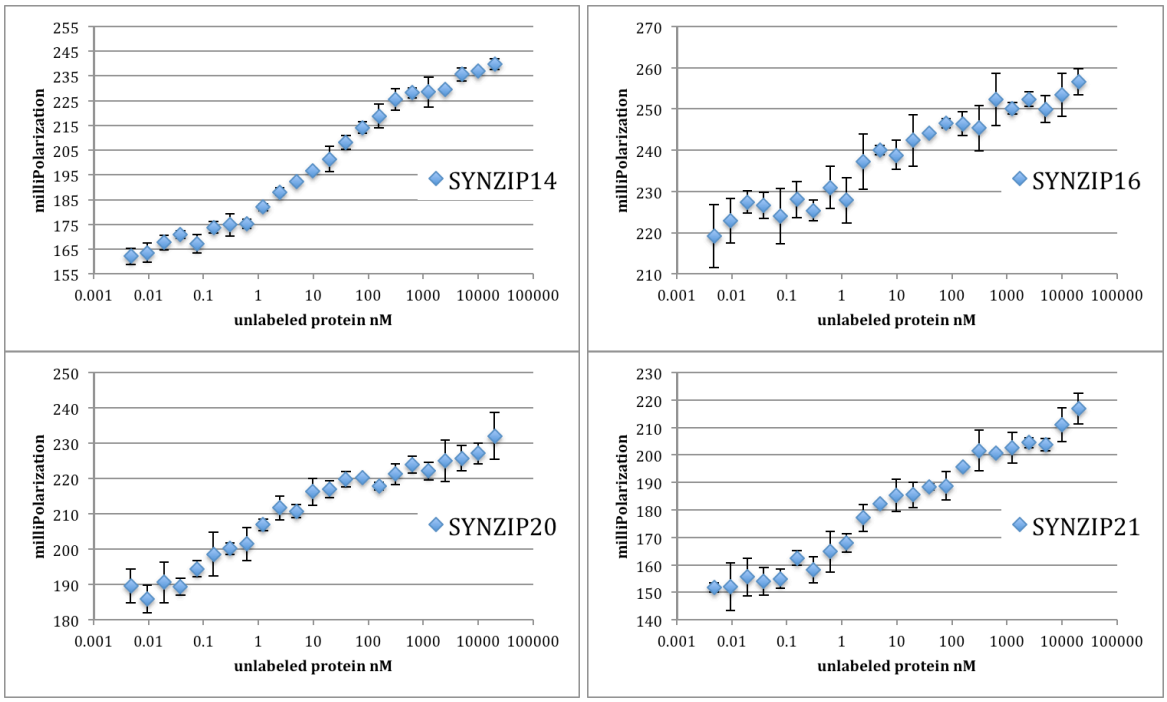
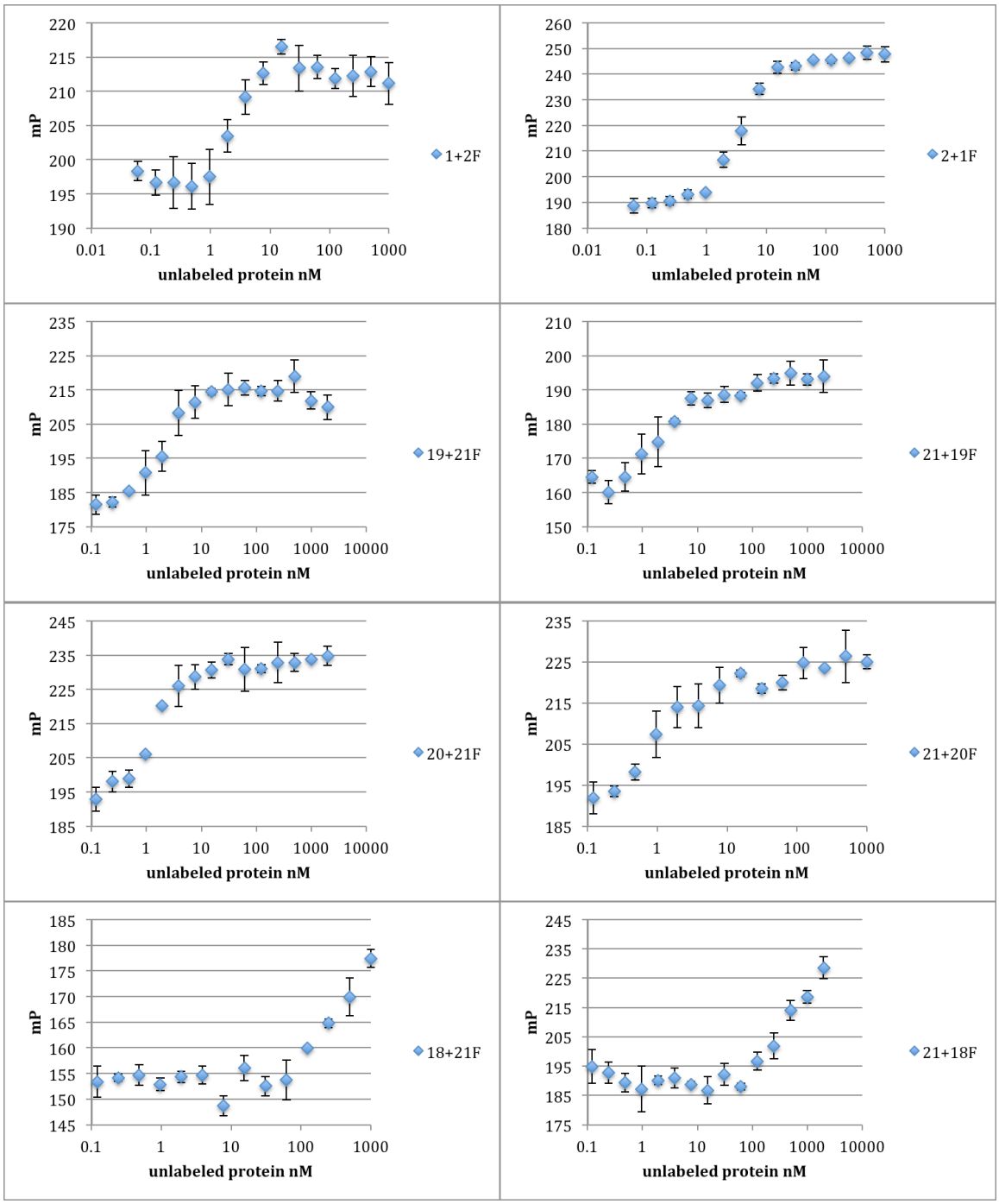


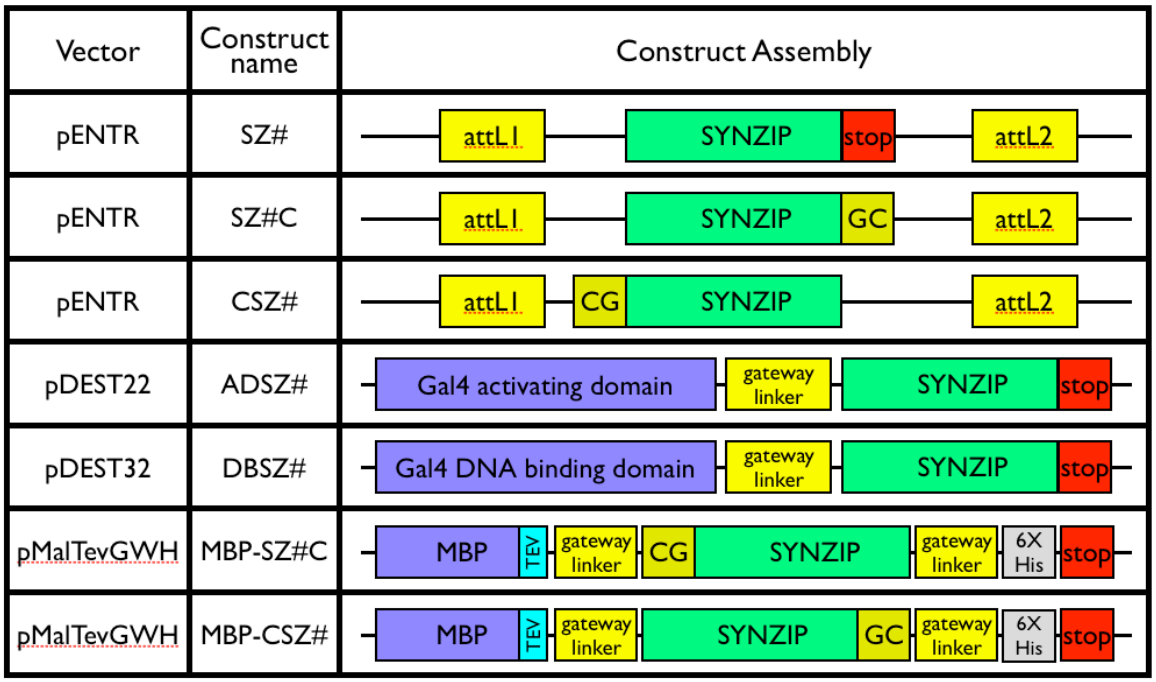
Supplementary Figure 1. Fluorescence Polarization of weakly interacting SYNZIP pairs. Each plot shows reciprocal measurements, with each interaction partner used in turn as the labeled species. The labeled species is indicated with an “f”. Error bars indicate ±1 standard deviation over three replicates.



Supplementary Figure 2. Fluorescence Polarization of self-interacting SYNZIP pairs. Unlabeled MBP-SYNZIP is titrated against 10 nM labeled MBP-SYNZIP. Error bars indicate ±1 standard deviation over three replicates.



Supplementary Figure 3. Raw Fluorescence Polarization of interacting SYNZIP pairs. Unlabeled MBP-SYNZIP is titrated against 10 nM labeled MBP-SYNZIP. The labeled species is indicated with an "F". Error bars indicate ±1 standard deviation over three replicates.



Supplementary Figure 3. SYNZIP cloning constructs. "#" indicates SYNZIP number. Boxes denoted attL1 and attL2 indicate gateway recombination region. Boxes denoted gateway linker indicate gateway recombination sites post recombination. Boxes denoted CG or GC indicate Cys-Gly added to SYNZIP sequences.

Supplementary Table 1. SYNZIP sequences

SYNZIP1	NLVAQLENEVASLENENETLKKKNLHKKDLIAYLEKEIANLRKKIEE
SYNZIP2	ARNAYLRKKIARLKKDNLQLERDEQNLEKIIANLRDEIARLENEVASHEQ
SYNZIP3	NEVTTLENDAAFIENENAYLEKEIARLRKEKAALRNRLAHKK
SYNZIP4	QKVAELKNRVAVKLNRNEQLKNKVEELKNRNAYLKNELATLENEVARLENDVAE
SYNZIP5	NTVKELKNYIQELEERNAELKNLKEHLKFAKAELEFELAAHKFE
SYNZIP6	QKVAQLKNRVAYKLKENAKLENIVARLENDNANLEKDIANLEKDIANLERDVAR
SYNZIP7	KEIEYLEKEIERLKDLREHLKQDNAAHRQELNALRLEEAKLEFILAHLLST
SYNZIP8	KEIANLEKEIASLEKKVAVLKQRNAAHKQEVAALRKEIAYVEDEIQYVEDE
SYNZIP9	QKVESLKQKIEELKQRKAQLKNDIANLEKEIAYAET
SYNZIP10	NLLATLRSTAAVLENENHVLEKEKEKLRKEKEQLLNKLEAYK
SYNZIP11	ELTDELKNKKEALRKDNAALLNELASLENEIANLEKEIAYFK
SYNZIP12	NEDLVLENRLAALRNENAALENDLARLEKEIAYLEKEIEREK
SYNZIP13	QKVEELKNKIAELENRNAVKKNRVAHLKQEIAYLKDELAAHEFE
SYNZIP14	NDLDAYEREAEKLEKKNEVLRNRLAALENELATLRQEVASMKQELQS
SYNZIP15	FENVTHEFILATLENENAKLRRLEAKLERELARLRNEVAWL
SYNZIP16	NILASLENKKEELKKLNAHLLKEIENLEKEIANLEKEIAYFK
SYNZIP17	NEKEELKSKKAELRNRIEQLKQKREQLKQKIANLRKEIEAYK
SYNZIP18	SIAATLENDLARLENENARLEKDIANLERDLAKLEREEAYF
SYNZIP19	NELESLENKKEELKNRNEELKQKREQLKQKLAALRNKLDAYKNRL
SYNZIP20	STVEELLRAIQELEKRNAELKNRKEELKNLVAHLRQELAAHKYE
SYNZIP21	NEVAQLENDVAVIENENAYLEKEIARLRKEIAALRDRLAHKK
SYNZIP22	KRIAYLRKKIAALKKDNANLEKDIANLENEIERLIKEIKTLENEVASHEQ