

SYNZIP specification sheets

SYNZIP “spec sheets” are the full data for SYNZIP pairs that have been biophysically characterized and validated in at least one *in vivo* assay.

Alignments are taken either from the crystal structure, or are manually curated hypothetical alignments.

The interaction table entries are as follows:

Protein microarray (pa) is the *arrayscore* score generated from Reinke et al. 2010, ranging from 0 to 11, 0 being the strongest interaction. The two scores represent reciprocal measurements where each protein is printed on the surface and probed with the interacting partner and vice versa. The Y2H scores indicate colony growth on the respective selection media with “-” indicating no growth ranging to “+++” indicating maximum growth. These scores are manually curated from inspection of plate images and heatmap plots. MAPK scores are the fractional GFP intensities calculated as described in in the methods and range from 0 to 1, 0 being the strongest interaction. The two scores indicate a each zipper either fused to Ste5 or Msg5, unless noted otherwise.

Potential interactors are defined as: show interaction on protein microarray in at least one direction with an *arrayscore* score < 0.5 , show an interaction in Y2H in at least one direction of the reciprocal measurements with a pixel count > 1000 . Interactions that are weak in one assay (ie. protein microarray) and strong in the other (ie. Y2H), are indicated as interactors for the weaker assay.

All error bars show ± 1 standard deviation of measurement replicates.

All three versions of the pENTR vector constructs, as well as the MBP-SZ-His6x constructs are available for all SYNZIPs in the following “spec sheets”

SYNZIP1:SYNZIP2

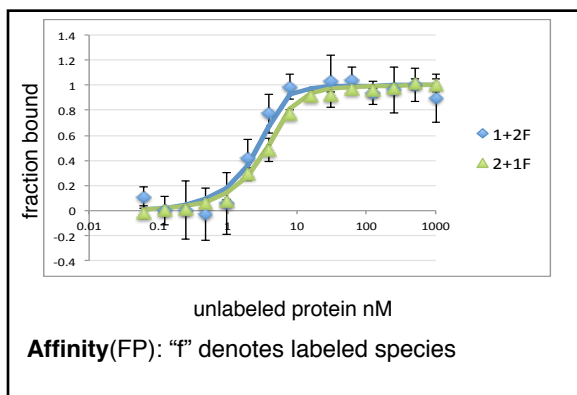
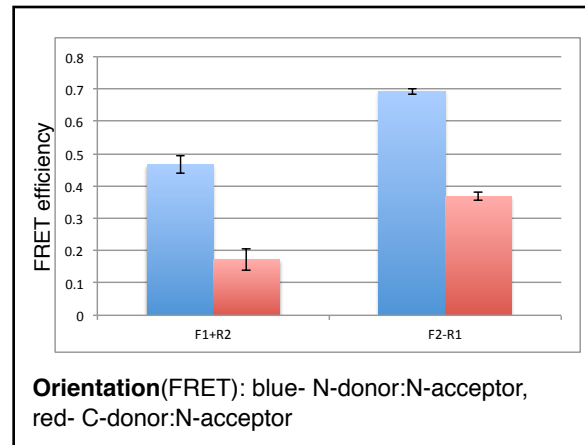
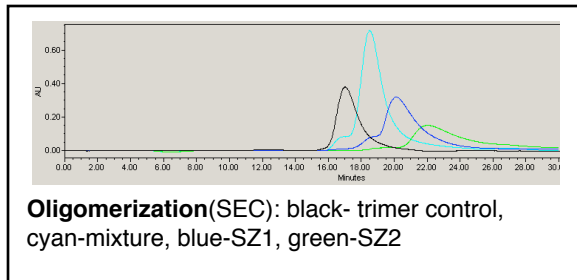
Alignment:

```

heptad position      fg abcdefg abcdefg abcdefg abcdefg abcdefg abcdefg abcdef
SZ1                  NL VAQLENE VASLENE NETLKKK NLHKKDL IAYLEKE IANLRKK IEE
SZ2                  AR NAYLRKK IARLKKD NLQLERD EQNLEKI IANLRDE IARLENE VASHEQ
-from crystal structure
  
```

Interaction Data

Protein microarray arrayscore	Y2H -Ura	Y2H -His	MAPK (fractional GFP intensity)	SEC	FRET	FP (K _d)
0/0.013	++	+++	0.237/0.329	dimer	parallel	< 10 nM
	slight growth variation			SZ2 monomer possibly interacts w/ column		



Interaction partners
 SZ1: 7(y2h), 11(pa,y2h), 22(pa,y2h)
 SZ2: 8(y2h), 13(pa,y2h), 14(pa,y2h), 19(pa,y2h), 20(pa,y2h)

Additional notes
 structure available: 3HE5.pdb

SYNZIP2:SYNZIP14

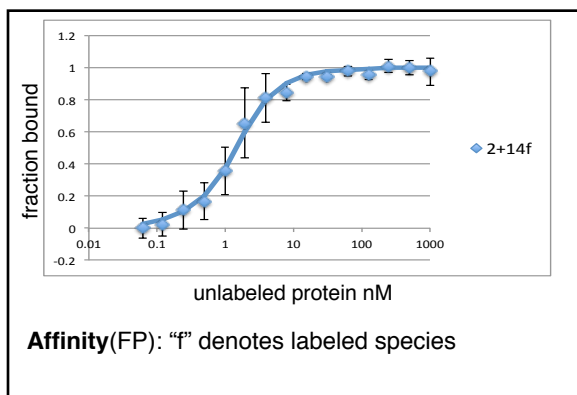
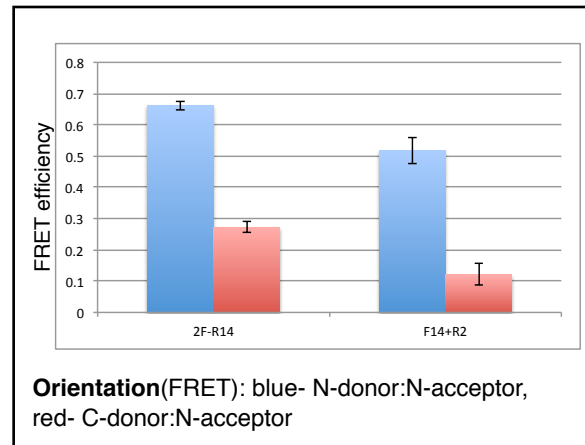
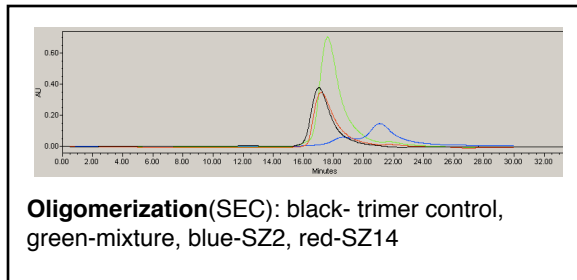
Alignment:

```

heptad position   fg abcdefg abcdefg abcdefg abcdefg abcdefg abcdefg abcdef
SZ2               AR NAYLRKK IARLKKD NLQLERD EQNLEKI IANLRDE IARLENE VASHEQ
SZ14              ND LDAYERE AEKLEKK NEVLRNR LAALENE LATLRQE VASKQOE LOS
hypothetical
  
```

Interaction Data

Protein microarray arrayscore	Y2H -Ura	Y2H -His	MAPK (fractional GFP intensity)	SEC	FRET	FP (K _d)
0.127/0.026	+++	+++	nd	dimer	parallel	< 10 nM
	weak one direction			2 monomer potentially interact.w/ column, 14 homodimer		



Interaction partners
 SZ2: 1 (pa,y2h), 8(y2h), 13(pa,y2h), 19(pa,y2h), 20(pa,y2h)
 SZ14: 8(y2h), 12(pa,y2h), 15(pa), 17(pa), 21(pa), 22(pa,y2h)

Additional notes

SYNZIP2:SYNZIP19

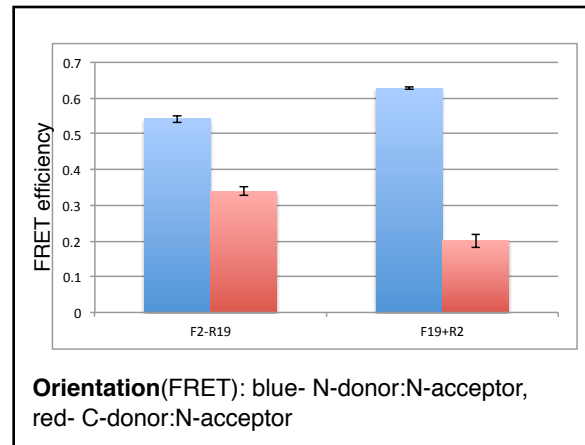
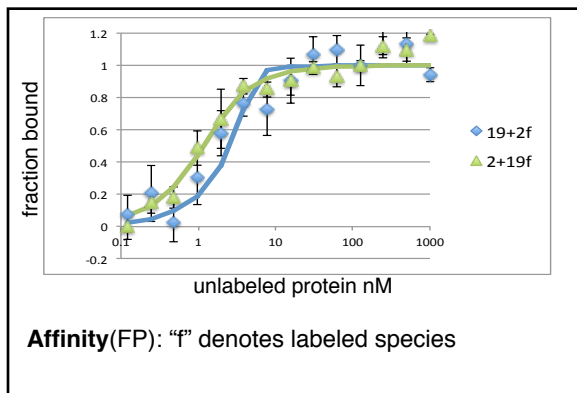
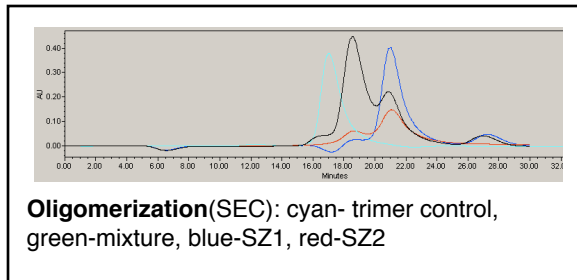
Alignment:

```

heptad position   fg abcdefg abcdefg abcdefg abcdefg abcdefg abcdefg abcdef
SZ2               AR NAYLRKK IARLKKD NLQLERD EQNLEKI IANLRDE IARLENE VASHEQ
SZ19              NE LESLENK KEELKNR NEELKQK REQLKQK LAALRNK LDAYKNR L
hypothetical
    
```

Interaction Data

Protein microarray arrayscore	Y2H -Ura	Y2H -His	MAPK (fractional GFP intensity)	SEC	FRET	FP (K _d)
0.041/0.227	-	+++	0.340/0.468	dimer	parallel	< 10 nM
		slight growth variation		2 & 19 monomer potentially interact.w/ column		



Interaction partners
SZ2: 1(pa,y2h), 8(y2h), 13(pa,y2h), 14(pa,y2h), 20(pa,y2h)
SZ19: 6(pa,y2h), 11(pa,y2h), 12(pa,y2h), 16(pa,y2h), 18(pa,y2h), 21(pa,y2h), 22(pa,y2h)

Additional notes

SYNZIP2:SYNZIP20

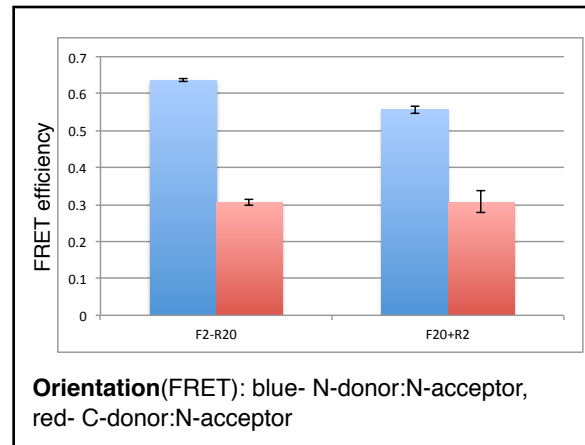
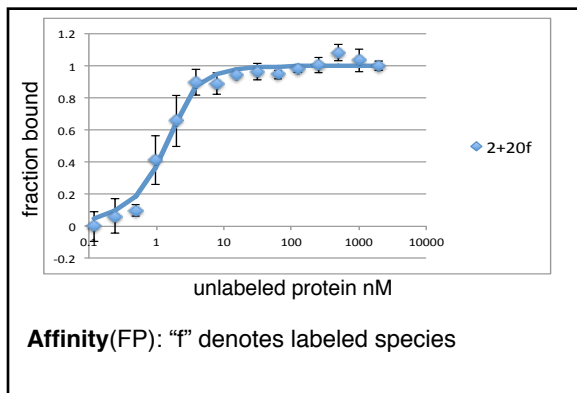
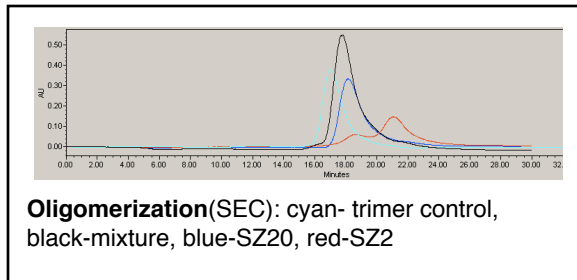
Alignment:

```

heptad position   fg abcdefg abcdefg abcdefg abcdefg abcdefg abcdefg abcdef
SZ2               AR NAYLRKK IARLKKD NLQLERD EQNLEKI IANLRDE IARLENE VASHEQ
SZ20              ST VEELLRA IQELEKR NAELKNR KEELKNL VAHLRQE LAHKYE
hypothetical
    
```

Interaction Data

Protein microarray arrayscore	Y2H -Ura	Y2H -His	MAPK (fractional GFP intensity)	SEC	FRET	FP (K _d)
0/0	-	+++	0.315	dimer	parallel	< 10 nM
			Ste5:SZ20- Msg5:SZ2 tested	2 monomer potentially interact.w/ column, 20 homodimer		



Interaction partners
SZ2: 1(pa,y2h), 8(y2h), 13(pa,y2h), 14(pa,y2h), 19(pa,y2h)
SZ20: 3(pa), 6(pa,y2h), 11(pa,y2h), 12(pa,y2h), 16(pa,y2h), 18(pa,y2h), 21(pa,y2h), 22(pa,y2h)

Additional notes

SYNZIP4:SYNZIP21

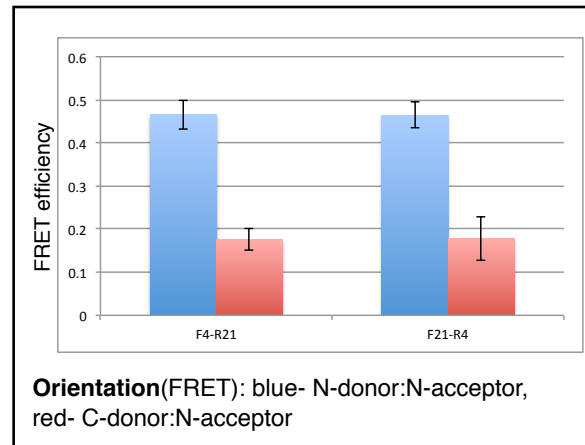
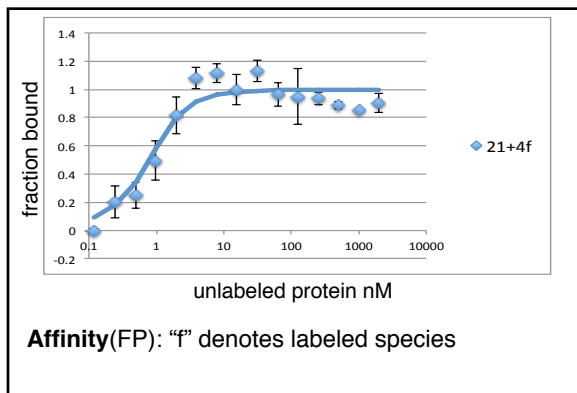
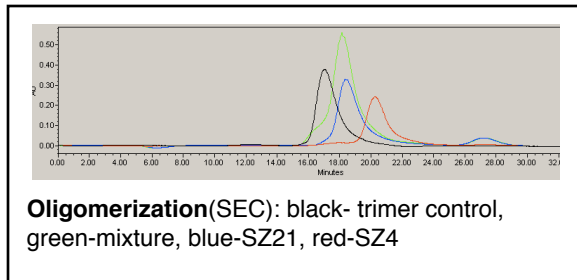
Alignment:

```

heptad position   fg abcdefg abcdefg abcdefg abcdefg abcdefg abcdefg abcdefg abcde
SZ4               QK VAE LKNR VAVK LNR NEQLKNK VEELKNR NAYLKNE LATLENE VARLEND VAE
SZ21              NE VAQLEND VAVIENE NAYLEKE IARLRKE IAALRDR LAHKK
hypothetical
    
```

Interaction Data

Protein microarray arrayscore	Y2H -Ura	Y2H -His	MAPK (fractional GFP intensity)	SEC	FRET	FP (K _d)
0.135/0.137	+++	+++	0.480	dimer	parallel	< 10 nM
	4 autoactivation	4 autoactivation	Ste5:SZ4 Msg5:SZ21 tested	21 homodimer		



Interaction partners
 SZ4: 3(pa,y2h), 6(pa,y2h), 18(pa,y2h), 22(y2h)
 SZ21: 5(pa,y2h), 8(y2h), 10(pa,y2h), 11(pa,y2h), 12(y2h), 13(pa,y2h), 14(pa), 15(pa), 16(pa,y2h), 17(pa,y2h), 19(pa,y2h), 20(pa,y2h)

Additional notes

SYNZIP5:SYNZIP16

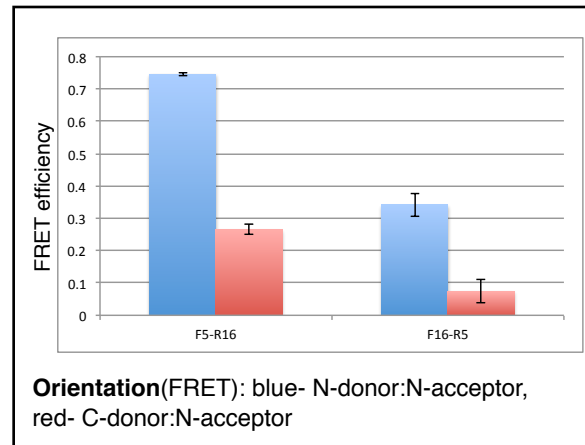
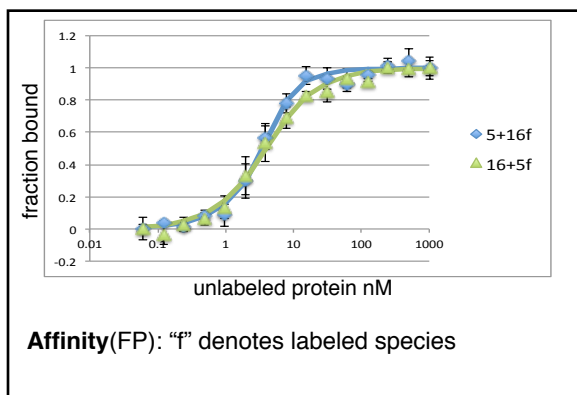
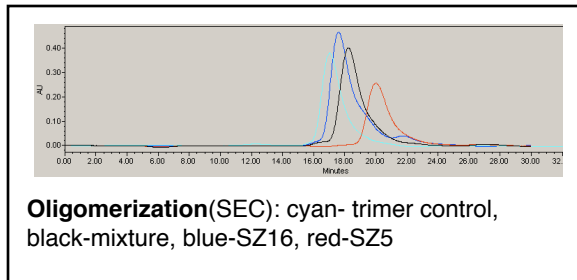
Alignment:

```

heptad position   fg abcdefg abcdefg abcdefg abcdefg abcdefg abcdefg
SZ5               NT VKELKNY IQELEER NAELKNL KEHLKFA KAELEFE LAHKFE
SZ16              NI LASLENK KEELKKL NAHLLKE IENLEKE IANLEKE IAYFK
hypothetical
    
```

Interaction Data

Protein microarray arrayscore	Y2H -Ura	Y2H -His	MAPK (fractional GFP intensity)	SEC	FRET	FP (K _d)
0.339/0.2	+++	+++	nd	dimer	parallel	< 10 nM



Interaction partners
 SZ5: 3(pa,y2h), 6(pa,y2h), 11(pa,y2h), 12(pa,y2h), 18(pa,y2h), 21(pa,y2h), 22(pa,y2h)
 SZ16: 19(pa,y2h), 20(pa,y2h), 21(pa,y2h)

Additional notes

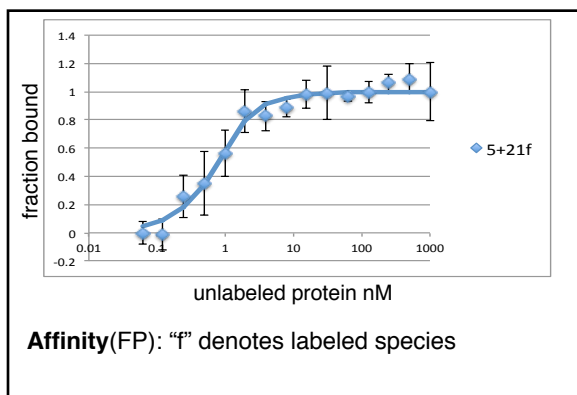
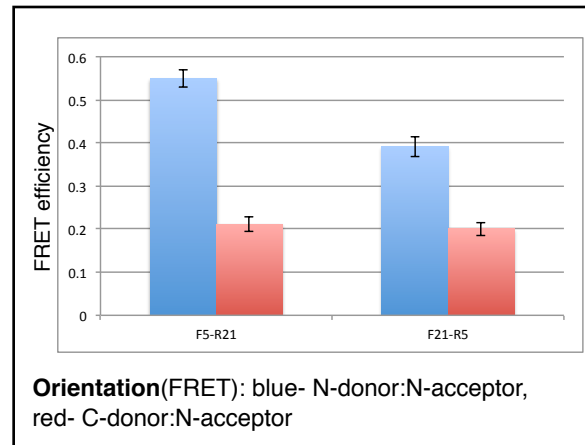
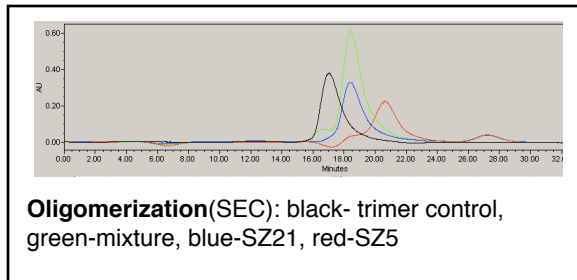
SYNZIP5:SYNZIP21

Alignment:

heptad position fg abcdefg abcdefg abcdefg abcdefg abcdefg abcdefg
 SZ5 NT VKELKNY IQELEER NAELKNL KEHLKFA KAELEFE LAHKFE
 SZ21 NE VAQLEND VAVIENE NAYLEKE IARLRKE IAALRDR LAHKK
 hypothetical

Interaction Data

Protein microarray <i>arrayscore</i>	Y2H -Ura	Y2H -His	MAPK (fractional GFP intensity)	SEC	FRET	FP (K _d)
0.18/0.22	+++	+++	nd	dimer	parallel	< 10 nM
				21 homodimer		



Interaction partners
 SZ5: 3(pa,y2h), 6(pa,y2h), 11(pa,y2h), 12(pa,y2h), 16(pa,y2h), 18(pa,y2h), 22(pa,y2h)
 SZ21: 4(pa,y2h), 8(y2h), 10(pa,y2h), 11(pa,y2h), 12(y2h), 13(pa,y2h), 14(pa), 15(pa), 16(pa,y2h), 17(pa,y2h), 19(pa,y2h), 20(pa,y2h)

Additional notes

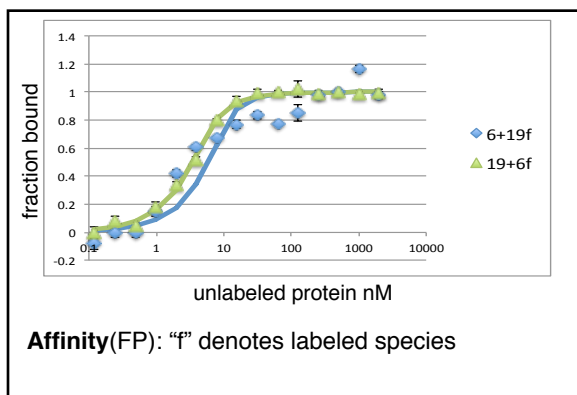
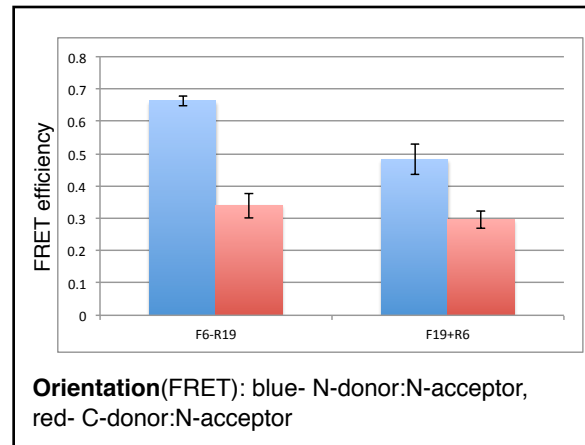
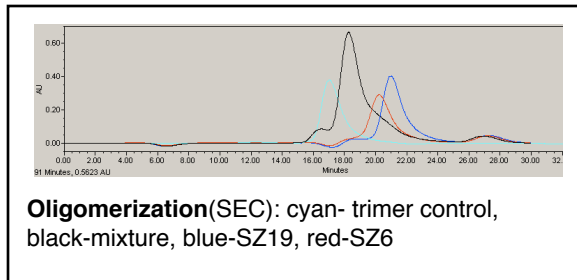
SYNZIP6:SYNZIP19

Alignment:

heptad position fg abcdefg abcdefg abcdefg abcdefg abcdefg abcdefg abcdefg abcdefg a
 SZ6 OK VAQLKNR VAYKLKE NAKLENI VARLEND NANLEKD IANLEKD IANLERD VAR
 SZ19 NE LESLENK KEELKNR NEELKQK REQLKQK LAALRNK LDAYKNR L
 hypothetical

Interaction Data

Protein microarray arrayscore	Y2H -Ura	Y2H -His	MAPK (fractional GFP intensity)	SEC	FRET	FP (K _d)
0.241/0	+	+++	nd	dimer	parallel	< 10 nM
	growth variation			19 monomer potentially interact.w/ column		



Interaction partners
 SZ6: 4(pa,y2h), 5(pa,y2h), 14 (y2h), 17(pa,y2h), 20(pa,y2h)
 SZ19: 2(pa,y2h), 11 (pa,y2h), 12(pa,y2h), 16 (pa,y2h), 18(pa,y2h), 21 (pa,y2h), 22 (pa,y2h)

Additional notes

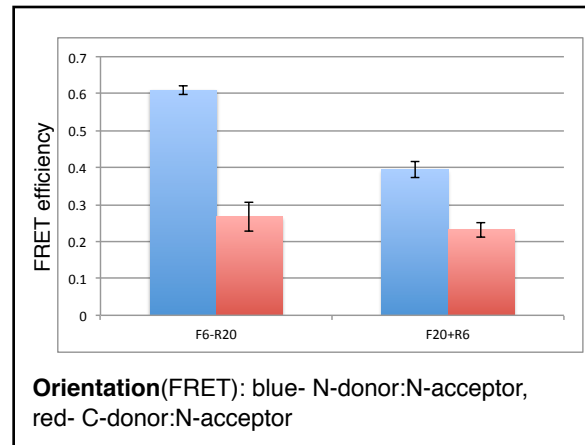
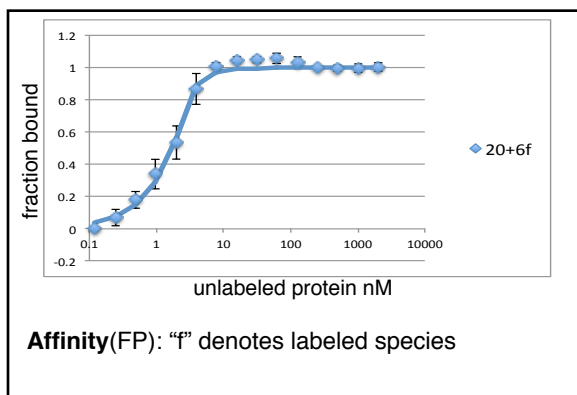
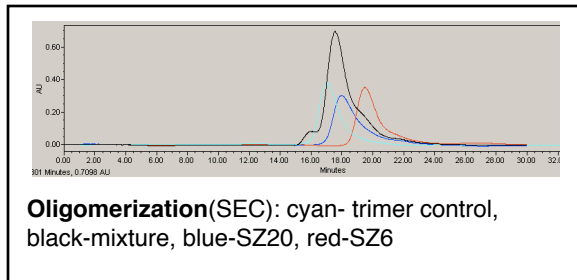
SYNZIP6:SYNZIP20

Alignment:

heptad position fg abcdefg abcdefg abcdefg abcdefg abcdefg abcdefg abcdefg abcdefg
 SZ6 QK VAQLKNR VAYKLKE NAKLENI VARLEND NANLEKD IANLEKD IANLERD VAR
 SZ20 ST VEELLRA IQELEKR NAELKNR KEELKNL VAHLRQE LAAHKYE
 hypothetical

Interaction Data

Protein microarray arrayscore	Y2H -Ura	Y2H -His	MAPK (fractional GFP intensity)	SEC	FRET	FP (K _d)
0.273/0.004	++	+++	0.582/0.685	dimer	parallel	< 10 nM
	growth variation			20 homodimer, runs as large dimer		



Interaction partners
 SZ6: 4(pa,y2h), 5(pa,y2h), 14 (y2h), 17(pa,y2h), 19(pa,y2h)
 SZ20: 2(pa,y2h), 3(pa), 11 (pa,y2h), 12(pa,y2h), 16(pa,y2h), 18(pa,y2h), 21 (pa,y2h), 22(pa,y2h)

Additional notes

SYNZIP6:SYNZIP21

“weak”

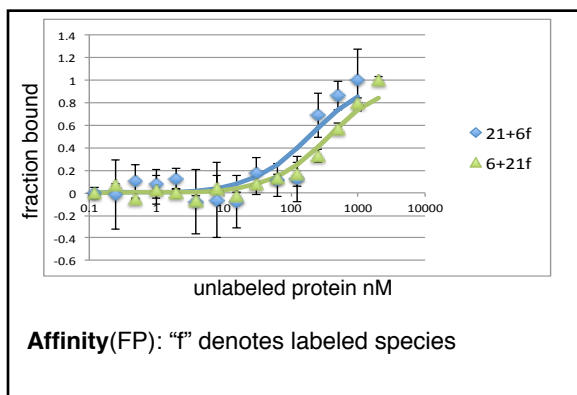
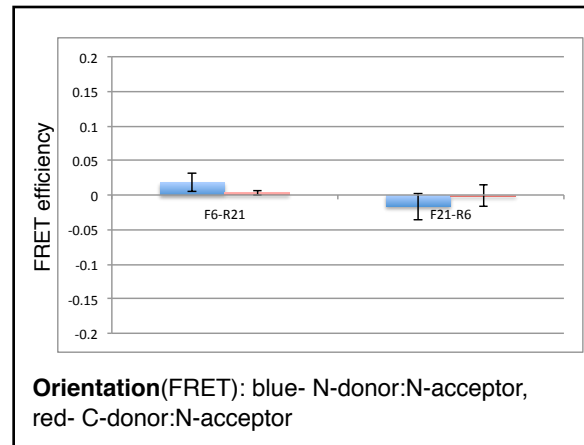
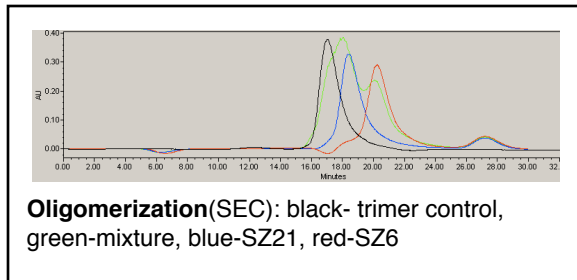
Alignment:

```

heptad position   fg abcdefg abcdefg abcdefg abcdefg abcdefg abcdefg abcdefg abc
SZ6               OK VAQLKNR VAYKLKE NAKLENI VARLEND NANLEKD IANLEKD IANLERD VAR
SZ21              NE VAQLEND VAVIENE NAYLEKE IARLRKE IAALRDR LAHKK
hypothetical
    
```

Interaction Data

Protein microarray <i>arrayscore</i>	Y2H -Ura	Y2H -His	MAPK (fractional GFP intensity)	SEC	FRET	FP (K _d)
1/1	-	-	nd	multiple species	na	> 200 nM
				21 homodimer		



Interaction partners
SZ6: 4(pa,y2h), 5(pa,y2h), 14 (y2h), 17(pa,y2h), 19(pa,y2h), 20(pa,y2h)
SZ21: 4(pa,y2h), 5(pa,y2h), 8(y2h), 10(pa,y2h), 11 (pa,y2h), 12(y2h), 13(pa,y2h), 14(pa), 15(pa), 16(pa,y2h), 17(pa,y2h), 19(pa,y2h), 20(pa,y2h)

Additional notes

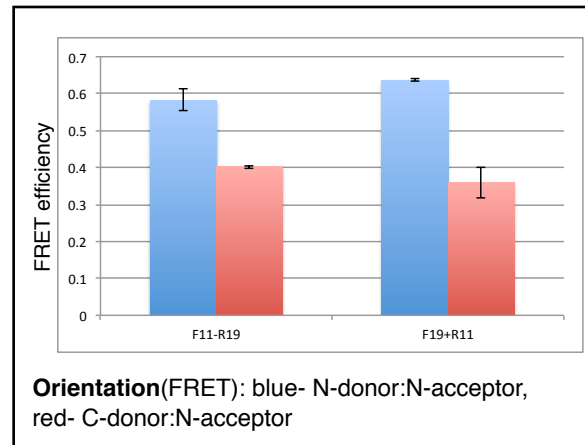
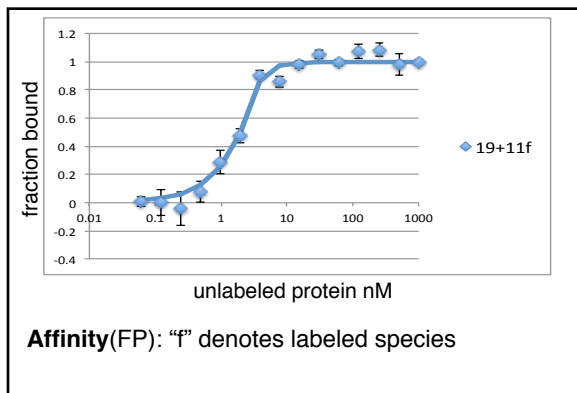
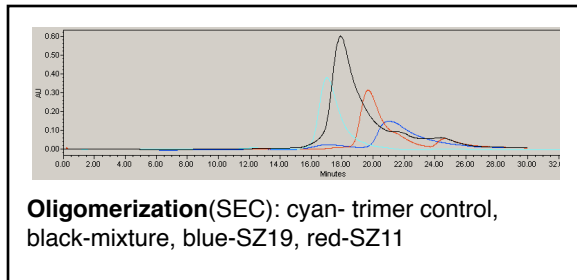
SYNZIP11:SYNZIP19

Alignment:

heptad position fg abcdefg abcdefg abcdefg abcdefg abcdefg abcdefg a
 SZ11 EL TDELKKN KEALRKD NAALLNE LASLENE IANLEKE IAYFK
 SZ19 NE LESLENK KEELKNR NEELKQK REQLKQK LAALRNK LDAYKNR L
 hypothetical

Interaction Data

Protein microarray arrayscore	Y2H -Ura	Y2H -His	MAPK (fractional GFP intensity)	SEC	FRET	FP (K _d)
0.462/0.289	-	+++	nd	dimer	parallel	< 10 nM
	11 autoactivation	11 autoactivation		19 monomer potentially interact.w/ column		



Interaction partners
 SZ11: 1(pa,y2h), 5(pa,y2h), 17(pa,y2h), 19(pa,y2h), 21(pa,y2h)
 SZ19: 2(pa,y2h), 6(pa,y2h), 12(pa,y2h), 16(pa,y2h), 18(pa,y2h), 21(pa,y2h), 22(pa,y2h)

Additional notes

SYNZIP11:SYNZIP20

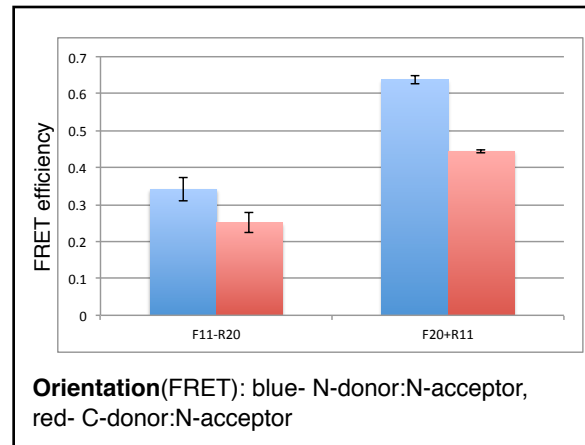
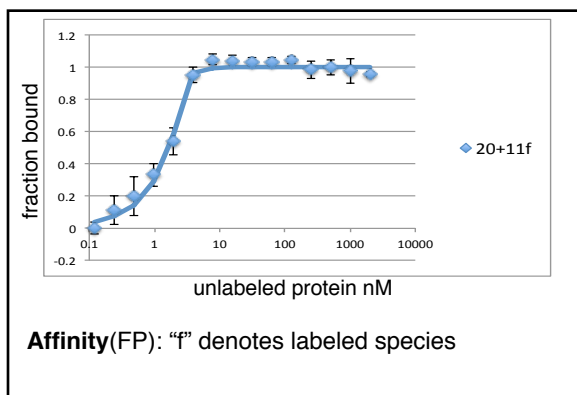
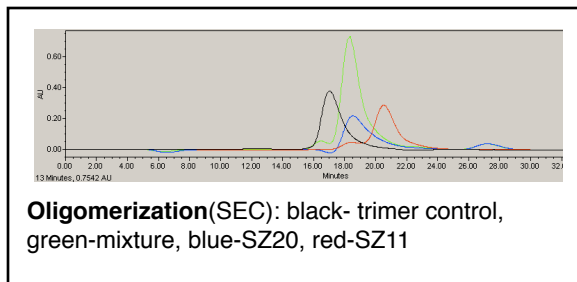
Alignment:

```

heptad position   fg abcdefg abcdefg abcdefg abcdefg abcdefg abcdefg
SZ11              EL TDELKKN KEALRKD NAALLNE LASLENE IANLEKE IAYFK
SZ20              ST VEELLRA IQELEKR NAELKNR KEELKNL VAHLRQE LAHKYE
hypothetical
  
```

Interaction Data

Protein microarray arrayscore	Y2H -Ura	Y2H -His	MAPK (fractional GFP intensity)	SEC	FRET	FP (K _d)
0/0.062	+++	+++	nd	dimer	parallel	< 10 nM
	11 autoacti vation	11 autoactiv ation		20 homodimer		



Interaction partners
 SZ11: 1(pa,y2h), 5(pa,y2h), 17(pa,y2h), 19(pa,y2h), 21(pa,y2h)
 SZ20: 2(pa,y2h), 3(pa), 6(pa,y2h), 12(pa,y2h), 16(pa,y2h), 18(pa,y2h), 21(pa,y2h), 22(pa,y2h)

Additional notes

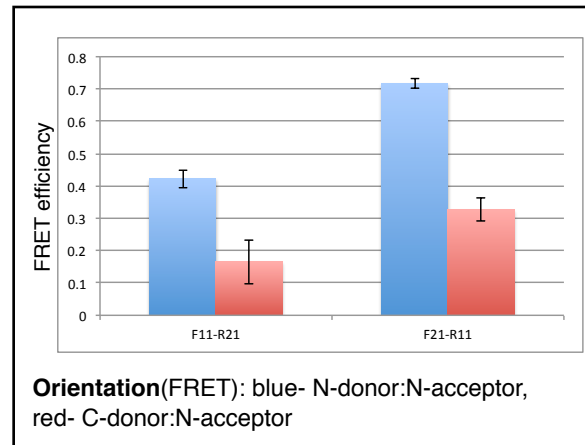
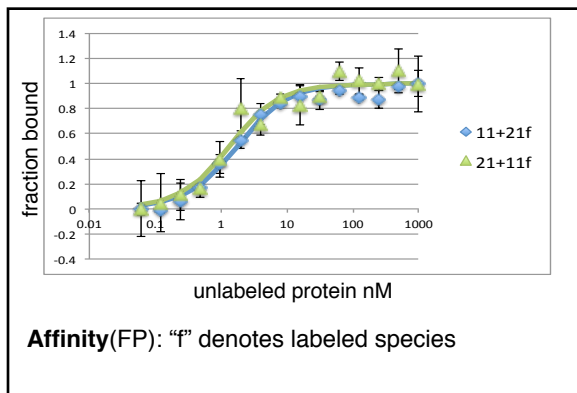
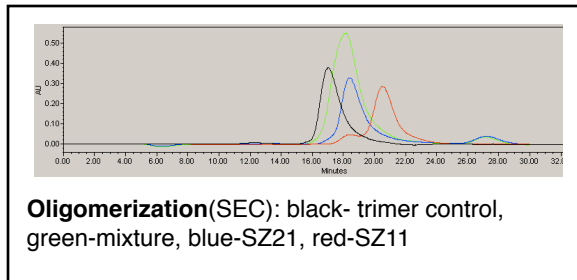
SYNZIP11:SYNZIP21

Alignment:

heptad position fg abcdefg abcdefg abcdefg abcdefg abcdefg abcde
 SZ11 EL TDELKKN KEALRKD NAALLNE LASLENE IANLEKE IAYFK
 SZ21 NE VAQLEND VAVIENE NAYLEKE IARLRKE IAALRDR LAHKK
 hypothetical

Interaction Data

Protein microarray arrayscore	Y2H -Ura	Y2H -His	MAPK (fractional GFP intensity)	SEC	FRET	FP (K _d)
0.343/0.233	+	+++	nd	dimer	parallel	< 10 nM
	11 autoacti vation	11 autoactiv ation		21 homodimer, runs as large dimer		



Interaction partners
 SZ11: 1(pa,y2h), 5(pa,y2h), 17(pa,y2h), 19(pa,y2h), 20(pa,y2h)
 SZ21: 4(pa,y2h), 5(pa,y2h), 8(y2h), 10(pa,y2h), 12(y2h), 13(pa,y2h), 14(pa), 15(pa), 16(pa,y2h), 17(pa,y2h), 19(pa,y2h), 20(pa,y2h)

Additional notes

SYNZIP14:SYNZIP17

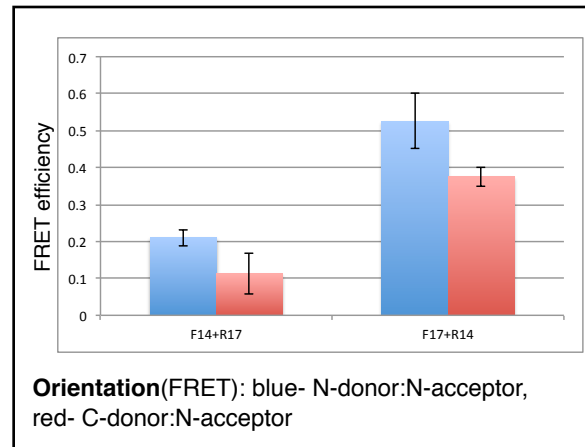
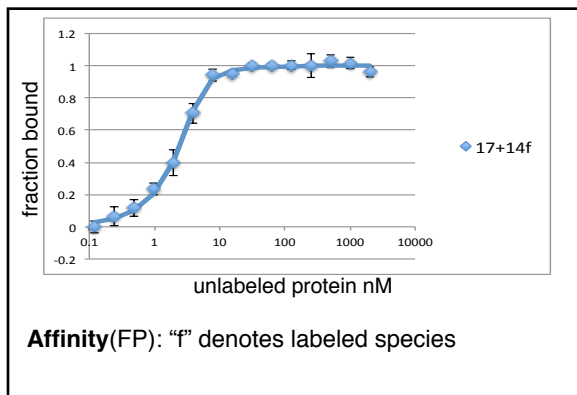
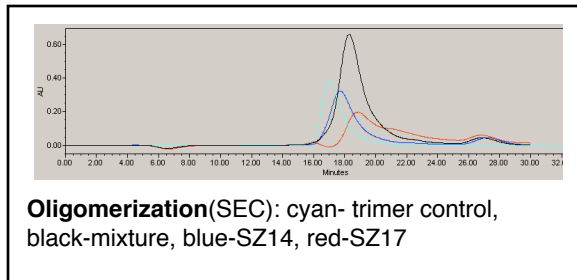
Alignment:

```

heptad position   fg abcdefg abcdefg abcdefg abcdefg abcdefg abcdefg abc
SZ14              ND LDAYERE AEKLEKK NEVLRNR LAALENE LATLRQE VASKMQE LQS
SZ17              NE KEELKSK KAELRNR IEQLKQK REQLKQK IANLRKE IEAYK
hypothetical
    
```

Interaction Data

Protein microarray <i>arrayscore</i>	Y2H -Ura	Y2H -His	MAPK (fractional GFP intensity)	SEC	FRET	FP (K _d)
0.625/0.241	-	-	nd	dimer	parallel	< 10 nM
				14 homodimer, 17 interacts with column		



Interaction partners
SZ14: 2(pa,y2h), 8(y2h), 12(pa,y2h), 15(pa), 21(pa), 22(pa,y2h)
SZ17: 3(pa,y2h), 6(pa,y2h), 11(pa,y2h), 12(pa,y2h), 15(pa), 18(pa,y2h), 21(pa,y2h), 22(pa,y2h)

Additional notes

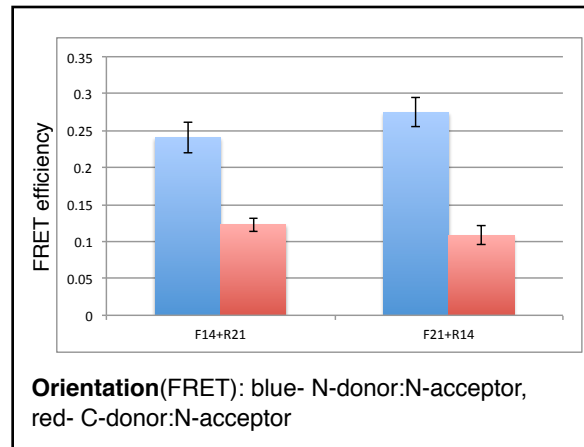
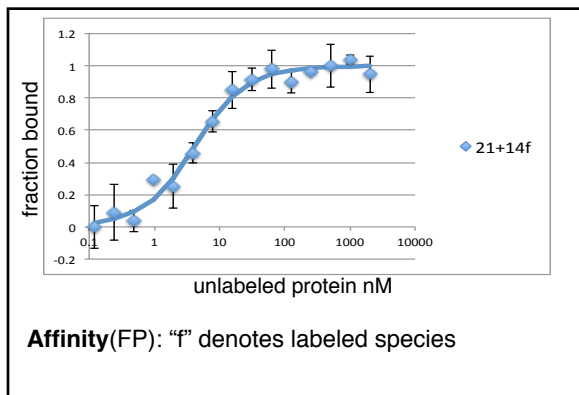
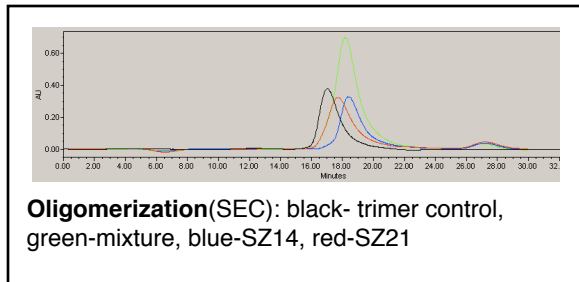
SYNZIP14:SYNZIP21

Alignment:

heptad position fg abcdefg abcdefg abcdefg abcdefg abcdefg abcdefg abc
 SZ14 ND LDAYERE AEKLEKK NEVLRNR LAALENE LATLRQE VASKMQE LQS
 SZ21 NE VAQLEND VAVIENE NAYLEKE IARLRKE IAALRDR LAHKK
 hypothetical

Interaction Data

Protein microarray arrayscore	Y2H -Ura	Y2H -His	MAPK (fractional GFP intensity)	SEC	FRET	FP (K _d)
0.515/0.358	-	+	nd	dimer	parallel	< 10 nM
		only one direction		14 & 21 homodimers		



Interaction partners
 SZ14: 2 (pa,y2h), 8(y2h), 12(pa,y2h), 15(pa), 17 (pa), 22(pa,y2h)
 SZ21: 4(pa,y2h), 5(pa,y2h), 8(y2h), 10(pa,y2h), 11 (pa,y2h), 12(y2h), 13(pa,y2h), 15(pa), 16 (pa,y2h), 17(pa,y2h), 19(pa,y2h), 20(pa,y2h)

Additional notes

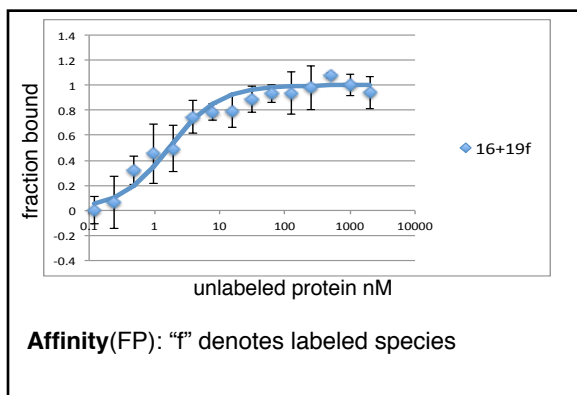
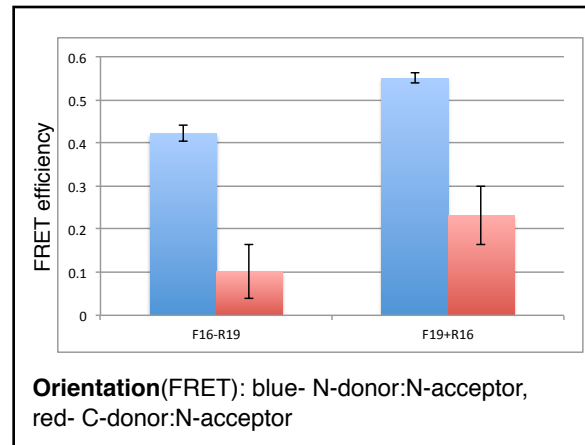
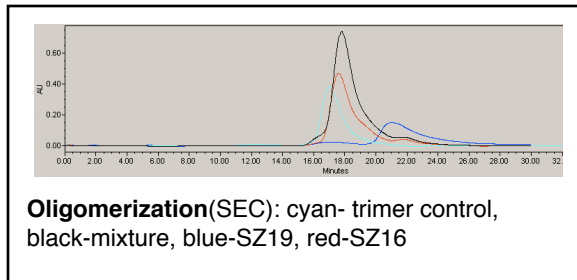
SYNZIP16:SYNZIP19

Alignment:

heptad position fg abcdefg abcdefg abcdefg abcdefg abcdefg abcdefg a
 SZ16 NI LASLENK KEELKKL NAHLLKE IENLEKE IANLEKE IAYFK
 SZ19 NE LESLENK KEELKNR NEELKQK REQLKQK LAALRNK LDAYKNR L
 hypothetical

Interaction Data

Protein microarray arrayscore	Y2H -Ura	Y2H -His	MAPK (fractional GFP intensity)	SEC	FRET	FP (K _d)
0.129/0.487	-	+++	nd	dimer	parallel	< 10 nM
		weak one direction		19 monomer potentially interact.w/ column, 16 homodimer		



Interaction partners
 SZ16: 5(pa,y2h), 20(pa,y2h), 21(pa,y2h)
 SZ19: 2(pa,y2h), 6(pa,y2h), 11(pa,y2h), 12(pa,y2h), 18(pa,y2h), 21(pa,y2h), 22(pa,y2h)

Additional notes

SYNZIP16:SYNZIP20

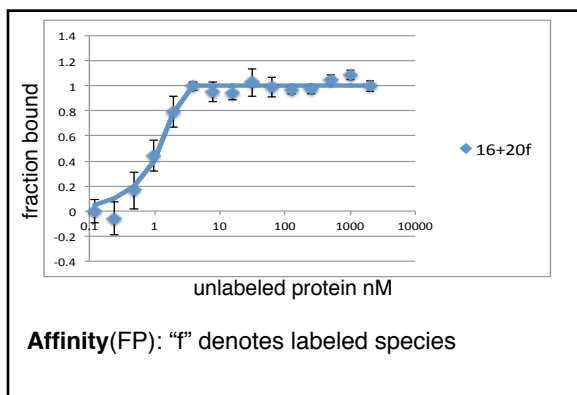
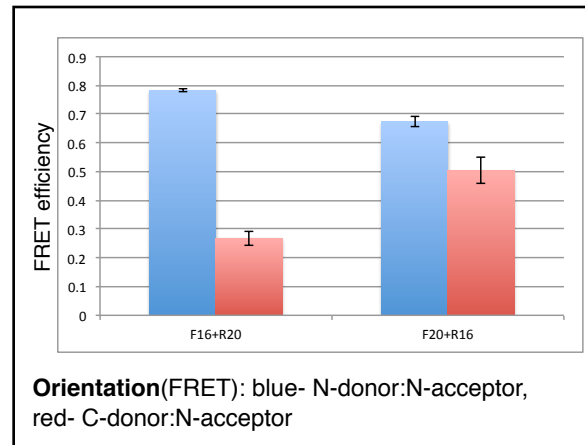
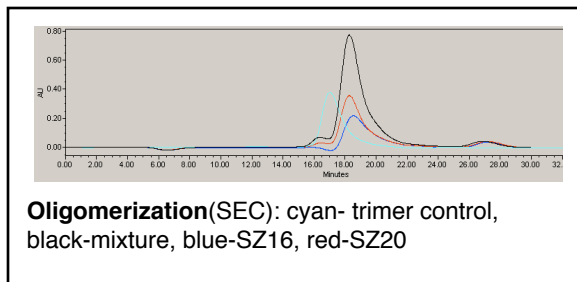
Alignment:

```

heptad position   fg abcdefg abcdefg abcdefg abcdefg abcdefg abcdefg
SZ16              NI LASLENK KEELKKL NAHLLKE IENLEKE IANLEKE IAYFK
SZ20              ST VEELLRA IQELEKR NAELKNR KEELKNL VAHLRQE LAHKYE
hypothetical
    
```

Interaction Data

Protein microarray arrayscore	Y2H -Ura	Y2H -His	MAPK (fractional GFP intensity)	SEC	FRET	FP (K _d)
0.12/0.047	+++	+++	nd	dimer	parallel	< 10 nM
				16 & 20 homodimers		



Interaction partners
 SZ16: 5(pa,y2h), 19(pa,y2h), 21(pa,y2h)
 SZ20: 2(pa,y2h), 3(pa), 6(pa,y2h), 11(pa,y2h), 12(pa,y2h), 18(pa,y2h), 21(pa,y2h), 22(pa,y2h)

Additional notes

SYNZIP16:SYNZIP21

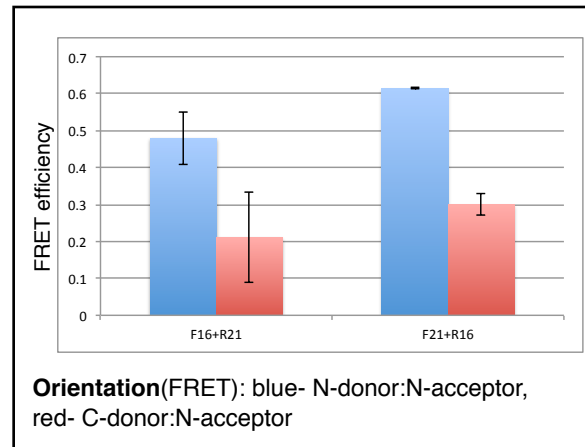
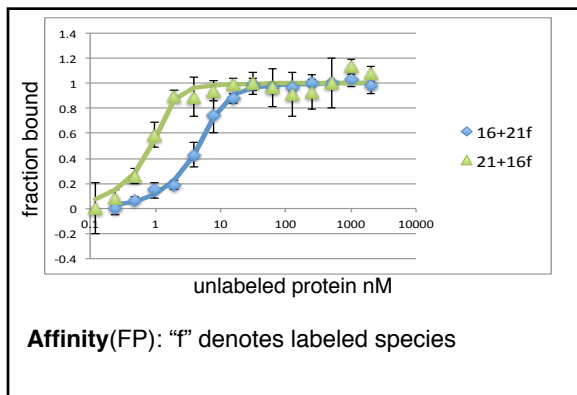
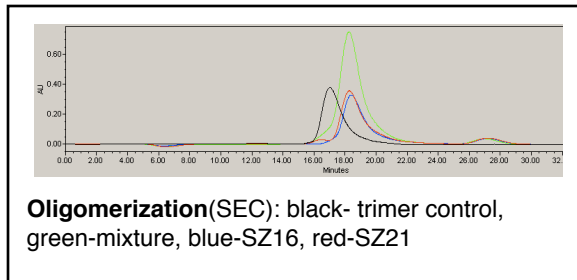
Alignment:

```

heptad position   fg abcdefg abcdefg abcdefg abcdefg abcdefg abcdefg abcdef
SZ16              NI LASLENK KEELKKL NAHLLKE IENLEKE IANLEKE IAYFK
SZ21              NE VAQLEND VAVIENE NAYLEKE IARLRKE IAALRDR LAHKK
hypothetical
    
```

Interaction Data

Protein microarray arrayscore	Y2H -Ura	Y2H -His	MAPK (fractional GFP intensity)	SEC	FRET	FP (K _d)
0.394/0.341	+++	+++	nd	dimer	parallel	< 10 nM
	no growth 1 direction			16 & 21 homodimers		



Interaction partners
 SZ16: 5(pa,y2h), 19(pa,y2h), 20(pa,y2h)
 SZ21: 4(pa,y2h), 5(pa,y2h), 8(y2h), 10(pa,y2h), 11(pa,y2h), 12(y2h), 13(pa,y2h), 14(pa), 15(pa), 17(pa,y2h), 19(pa,y2h), 20(pa,y2h)

Additional notes

SYNZIP17:SYNZIP18

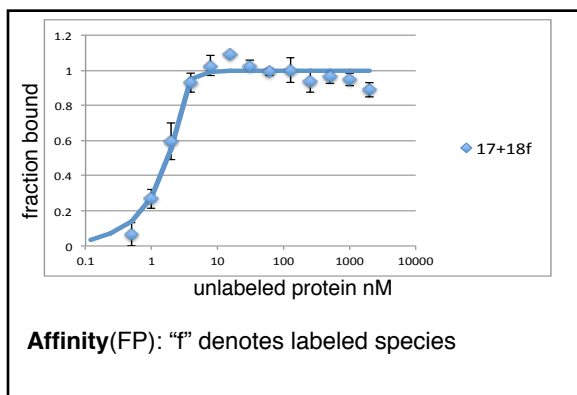
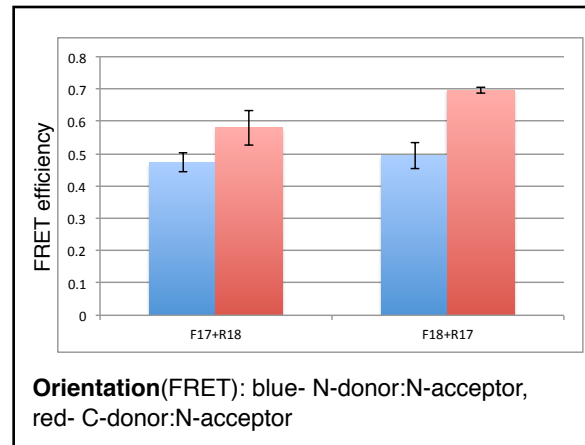
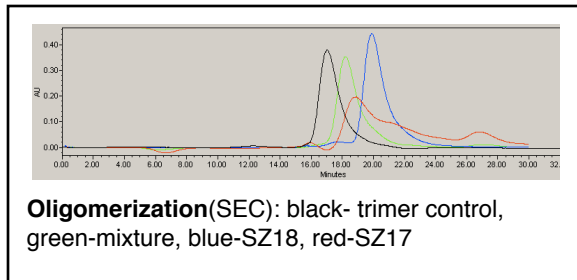
Alignment:

```

heptad position   fgabcdefgabcdefgabcdefgabcdefgabcdefgabcde
SZ17              NEKEELKSKKAELRNRIEQLKQKREQLKQKIANLRKEIEAYK
SZ18reverse      FYAEERELKALDRELNAIDKELRANENELRALDNELTAAIS
heptad position   dcbagfedcbagfedcbagfedcbagfedcbagfedcbagf
hypothetical
    
```

Interaction Data

Protein microarray arrayscore	Y2H -Ura	Y2H -His	MAPK (fractional GFP intensity)	SEC	FRET	FP (K _d)
0.035/0.19	+++	+++	nd	dimer	antiparallel	< 10 nM
	18 autoactivation	18 autoactivation		17 interacts with column		



Interaction partners
 SZ17: 3(pa,y2h), 6(pa,y2h), 11(pa,y2h), 12(pa,y2h), 14(pa,y2h), 15(pa), 21(pa,y2h), 22(pa,y2h)
 SZ18: 4(pa,y2h), 5(pa,y2h), 13(pa,y2h), 19(pa,y2h), 20(pa,y2h)

Additional notes

secondary alignment

```

                fgabcdefgabcdefgabcdefgabcdefgabcdefgabcde
SZ17            NEKEELKSKKAELRNRIEQLKQKREQLKQKIANLRKEIEAYK
SZ18  FYAEERELKALDRELNAIDKELRANENELRALDNELTAAIS
                dcbagfedcbagfedcbagfedcbagfedcbagfedcbagf
    
```

SYNZIP17:SYNZIP21

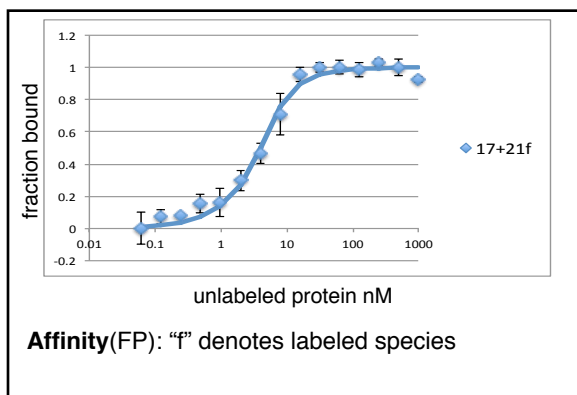
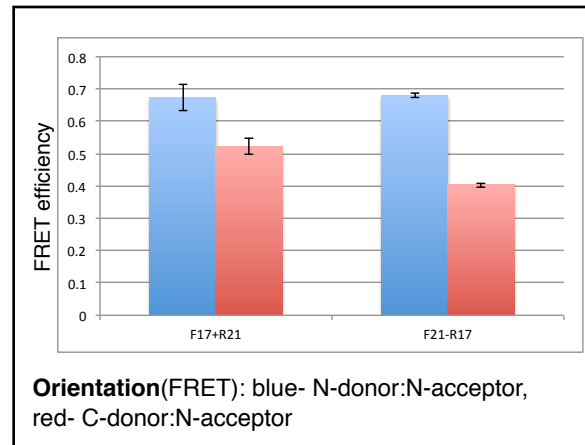
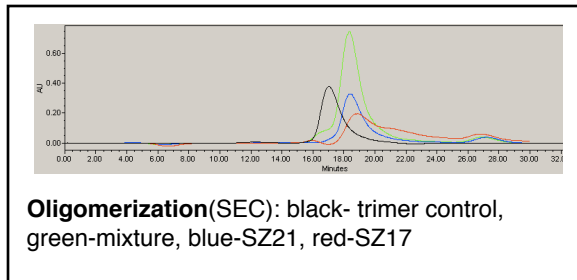
Alignment:

```

heptad position   fg abcdefg abcdefg abcdefg abcdefg abcdefg abcde
SZ17              NE KEELKSK KAELRNR IEQLKQK REQLKQK IANLRKE IEAYK
SZ21              NE VAQLEND VAVIENE NAYLEKE IARLRKE IAALRDR LAHKK
hypothetical
    
```

Interaction Data

Protein microarray arrayscore	Y2H -Ura	Y2H -His	MAPK (fractional GFP intensity)	SEC	FRET	FP (K _d)
0.244/0.188	+++	+++	nd	dimer	parallel	< 10 nM
	weak 1 direction			21 homodimer, 17 interacts with column		



Interaction partners
 SZ17: 3(pa,y2h), 6(pa,y2h), 11(pa,y2h), 12(pa,y2h), 14(pa,y2h), 15(pa), 18(pa,y2h), 22(pa,y2h)
 SZ21: 4(pa,y2h), 5(pa,y2h), 8(y2h), 10(pa,y2h), 11(pa,y2h), 12(y2h), 13(pa,y2h), 14(pa), 15(pa), 16(pa,y2h), 19(pa,y2h), 20(pa,y2h)

Additional notes

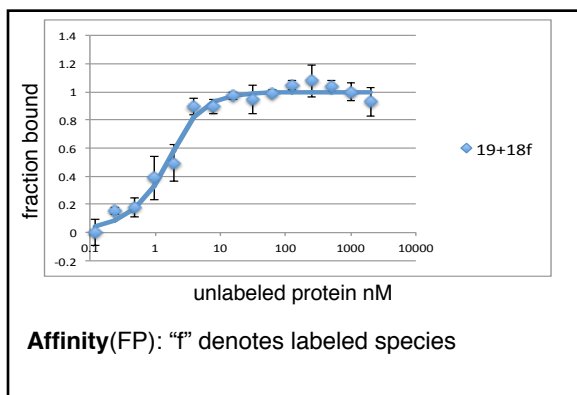
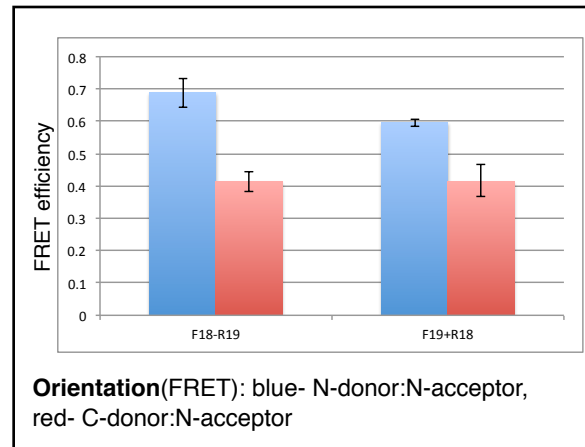
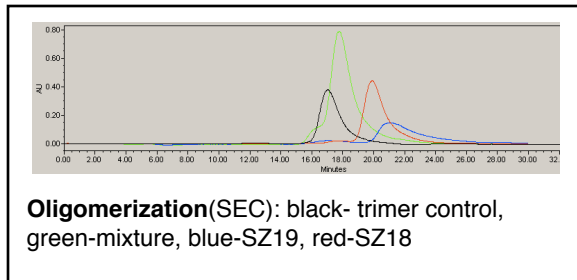
SYNZIP18:SYNZIP19

Alignment:

heptad position fg abcdefg abcdefg abcdefg abcdefg abcdefg abcdefg a
 SZ18 SI AATLEND LARLENE NARLEKD IANLERD LAKLERE EAYF
 SZ19 NE LESLENK KEELKNR NEELKQK REQLKQK LAALRNK LDAYKNR L
 hypothetical

Interaction Data

Protein microarray arrayscore	Y2H -Ura	Y2H -His	MAPK (fractional GFP intensity)	SEC	FRET	FP (K _d)
0/0.107	+++	+++	0.376/0.263	dimer	parallel	< 10 nM
	18 autoacti vation	18 autoactiv ation		19 monomer potentially interact.w/ column		



Interaction partners
 SZ18: 4(pa,y2h), 5(pa,y2h), 13(pa,y2h), 17(pa,y2h), 20(pa,y2h)
 SZ19: 2(pa,y2h), 6(pa,y2h), 11(pa,y2h), 12(pa,y2h), 16(pa,y2h), 21(pa,y2h), 22(pa,y2h)

Additional notes

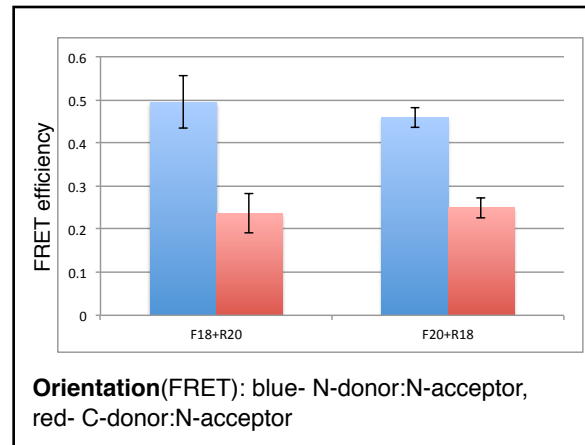
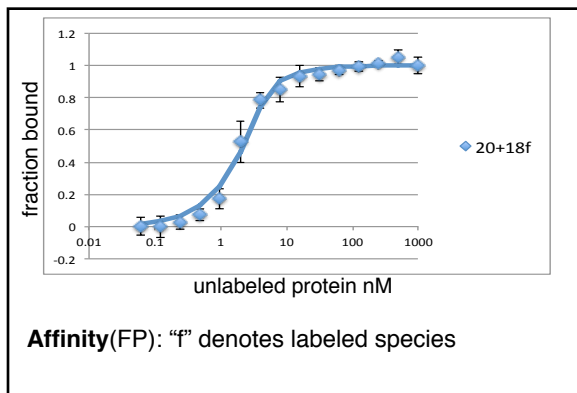
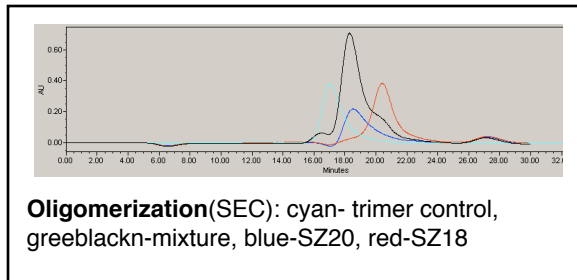
SYNZIP18:SYNZIP20

Alignment:

heptad position fg abcdefg abcdefg abcdefg abcdefg abcdefg abcdefg
 SZ18 SI AATLEND LARLENE NARLEKD IANLERD LAKLERE EAYF
 SZ20 ST VEELLRA IQELEKR NAELKNR KEELKNL VAHLRQE LAAHKYE
 hypothetical

Interaction Data

Protein microarray arrayscore	Y2H -Ura	Y2H -His	MAPK (fractional GFP intensity)	SEC	FRET	FP (K _d)
0.016/0.288	+++	+++	nd	dimer	parallel	< 15 nM
	18 autoacti vation	18 autoactiv ation		20 homodimer		



Interaction partners
 SZ18: 4(pa,y2h), 5(pa,y2h), 13(pa,y2h), 17(pa,y2h), 19(pa,y2h)
 SZ20: 2(pa,y2h), 3(pa), 6(pa,y2h), 11(pa,y2h), 12(pa,y2h), 16(pa,y2h), 21(pa,y2h), 22(pa,y2h)

Additional notes

SYNZIP18: SYNZIP 21

“weak”

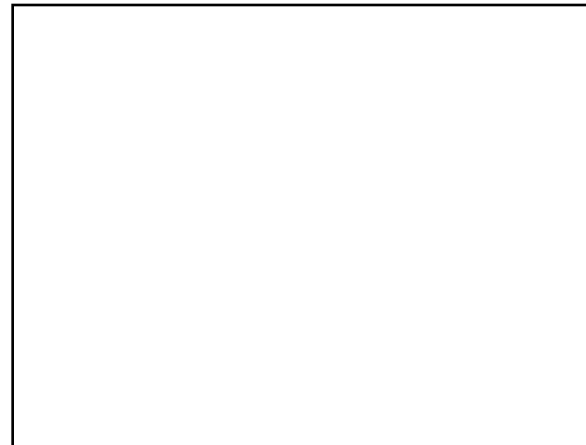
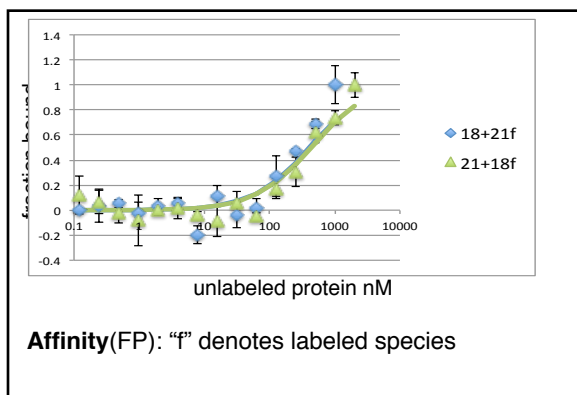
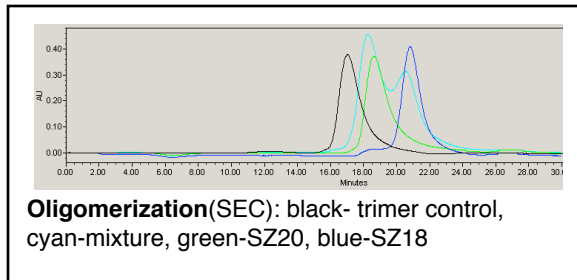
Alignment:

```

heptad position      fg abcdefg abcdefg abcdefg abcdefg abcdefg abcdefg
SZ18                 SI AATLEND LARLENE NARLEKD IANLERD LAKLERE EAYF
SZ21                 NE VAQLEND VAVIENE NAYLEKE IARLRKE IAALDR LAHKK
hypothetical
    
```

Interaction Data

Protein microarray arrayscore	Y2H -Ura	Y2H -His	MAPK (fractional GFP intensity)	SEC	FRET	FP (K _d)
1.126/1.348	-	-	nd	no interaction	nd	>400 nM
	18 autoacti vation	18 autoactiv ation		20 homodimer		



Interaction partners
SZ18: 4(pa,y2h), 5(pa,y2h), 13(pa,y2h), 17(pa,y2h), 19(pa,y2h)
SZ21: 4(pa,y2h), 5(pa,y2h), 8(y2h), 10(pa,y2h), 11(pa,y2h), 12(y2h), 13(pa,y2h), 14(pa), 15(pa), 16(pa,y2h), 17(pa,y2h), 19(pa,y2h)

Additional notes

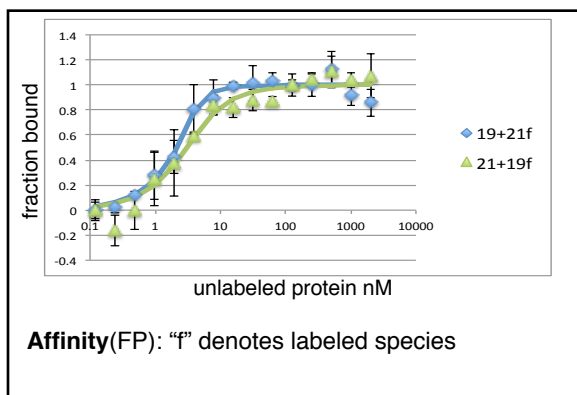
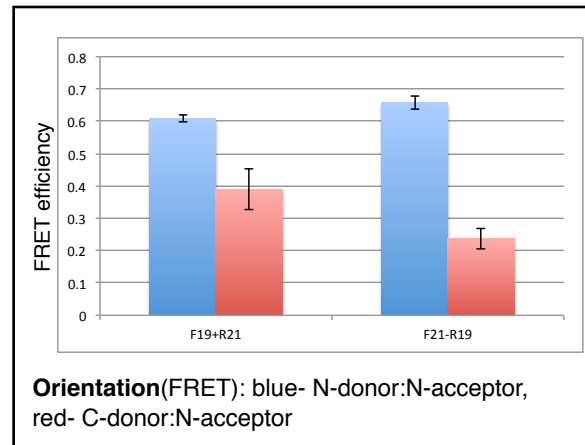
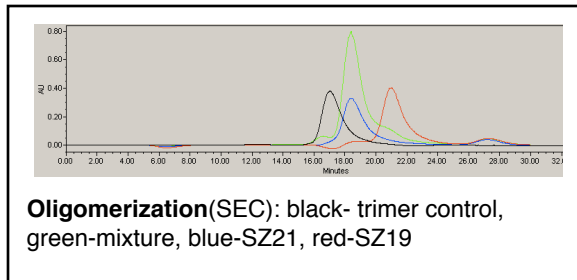
SYNZIP19:SYNZIP21

Alignment:

heptad position fg abcdefg abcdefg abcdefg abcdefg abcdefg abcdefg a
 SZ19 NE LESLENK KEELKNR NEELKQK REQLKQK LAALRNK LDAYKNR L
 SZ21 NE VAQLEND VAVIENE NAYLEKE IARLRKE IAALRDR LAHKK
 hypothetical

Interaction Data

Protein microarray arrayscore	Y2H -Ura	Y2H -His	MAPK (fractional GFP intensity)	SEC	FRET	FP (K _d)
0.089/0	+++	+++	0.357/0.293	dimer	parallel	< 10 nM
				19 monomer potentially interact.w/ column, 21 homodimer		



Interaction partners
 SZ19: 2(pa,y2h), 6(pa,y2h), 11(pa,y2h), 12(pa,y2h), 16(pa,y2h), 18(pa,y2h), 22(pa,y2h)
 SZ21: 4(pa,y2h), 5(pa,y2h), 8(y2h), 10(pa,y2h), 11(pa,y2h), 12(y2h), 13(pa,y2h), 14(pa), 15(pa), 16(pa,y2h), 17(pa,y2h), 20(pa,y2h)

Additional notes

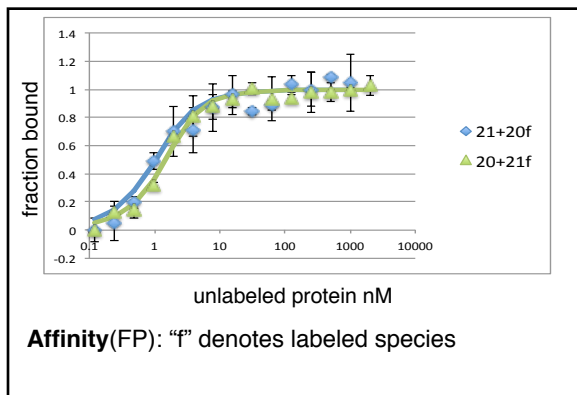
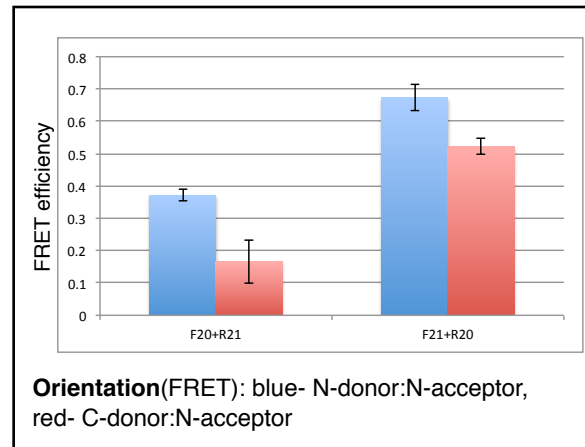
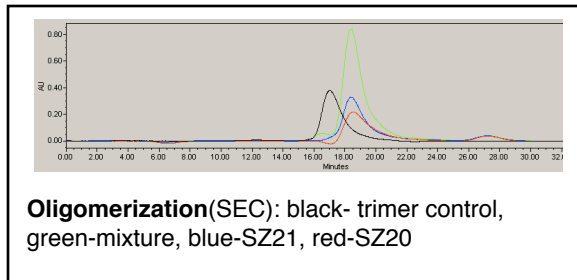
SYNZIP20:SYNZIP21

Alignment:

heptad position fg abcdefg abcdefg abcdefg abcdefg abcdefg abcdefg abcdef
 SZ20 ST VEELLRA IQELEKR NAELKNR KEELKNL VAHLRQE LAHKYE
 SZ21 NE VAQLEND VAVIENE NAYLEKE IARLRKE IAALRDR LAHKK
 hypothetical

Interaction Data

Protein microarray arrayscore	Y2H -Ura	Y2H -His	MAPK (fractional GFP intensity)	SEC	FRET	FP (K _d)
0.227/0.173	+++	+++	nd	dimer	parallel	< 10 nM
	slight growth variation			20 & 21 homodimers		



Interaction partners
 SZ20: 2(pa,y2h), 3(pa), 6(pa,y2h), 11(pa,y2h), 12(pa,y2h), 16(pa,y2h), 18(pa,y2h), 22(pa,y2h)
 SZ21: 4(pa,y2h), 5(pa,y2h), 8(y2h), 10(pa,y2h), 11(pa,y2h), 12(y2h), 13(pa,y2h), 14(pa), 15(pa), 16(pa,y2h), 17(pa,y2h), 19(pa,y2h)

Additional notes