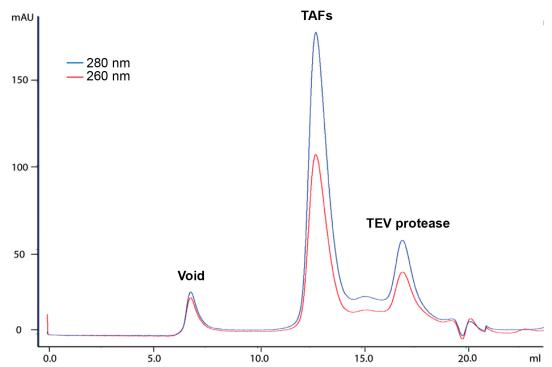
SUPPLEMENTARY MATERIALS accompanying the manuscript "The TAFs of TFIID bind and rearrange the topology of the TATA-less RPS5 promoter"

SUPPLEMENTARY FIGURE LEGENDS



Supplementary Figure S1. A size-exclusion chromatography profile of the TAF complex purification.

TAF5 YEAST Mass: 89426 Score: 1049 Matches: 30(26) Sequences: 25(23) emPAI: 1.74
Transcription initiation factor TFIID subunit 5 OS=Saccharomyces cerevisiae (strain ATCC 204508 / S288c) GN=TAF5 PE=1 SV=1
Check to include this hit in error tolerant search or archive report

Q	uery	Observed	Mr (expt)	Mr(calc)	ppm	Miss	Score	Expect	Rank	Unique	Peptide
✓	50	496.2864	990.5582	990.5750	-16.88	0	47	0.031	1	U	R.IVLEYLNK.K
KKKKKKKKKKK	55	506.2456	1010.4766	1010.4920	-15.29	0	52	0.0054	1	U	K.YLLSGSEDK.T
	73	537.7444	1073.4742	1073.4890	-13.79	0	43	0.016	1	U	K.DFHGSEINR.L
	92	573.2864	1144.5582	1144.5764	-15.89	0	61	0.00082	1	U	K.NAIYSLSYSK.E
	110	587.3151	1172.6156	1172.6302	-12.45	0	50	0.017	1	U	R. SNLALAGGAFRP
	139	626.7771	1251.5396	1251.5554	-12.65	0	68	4.7e-005	1	U	R.MWDVSTGDSVR.L
	146	632.7916	1263.5687	1263.5844	-12.39	0	43	0.027	1	U	R. SNGPFSASDLNR.I
	162	642.3332	1282.6518	1282.6557	-3.06	0	72	7e-005	1	U	R.IAAAGFQDSYIK.I
	189	673.8178	1345.6211	1345.6262	-3.83	0	63	0.00029	1	U	K. ENEVASAFQSHK.Y
	208	694.8590	1387.7034	1387.7095	-4.41	0	74	5.1e-005	1	U	R. LEGLNAPENYIR.A
V	244	729.3942	1456.7738	1456.7885	-10.13	0	68	0.00019	1	U	K.TAKPISNPTNLSSK.R
✓	272	762.8820	1523.7494	1523.7692	-13.01	0	55	0.0035	1	U	K.EGNVLISGGADHTVR.V
~	304	821.4386	1640.8627	1640.8662	-2.10	0	92	7.3e-007	1	U	R. TVI PTSDLVASFYTK.K
V	366	925.9168	1849.8191	1849.8303	-6.02	0	81	2.7e-006	1	U	K.QLNQQTAGDNYSGANNR.T
	380	635.9650	1904.8732	1904.9089	-18.76	0	34	0.19	1	U	K.QSTNQNQNGTHQPQPVK.N
\checkmark	407	998.9779	1995.9412	1995.9538	-6.33	0	(47)	0.014	1	U	K.TLVGHSGTVYSTSFSPDNK.Y
V	408	666.3210	1995.9412	1995.9538	-6.33	0	66	0.00015	1	U	K.TLVGHSGTVYSTSFSPDNK.Y
X	414	1012.0349	2022.0552	2022.0721	-8.33	0	(32)	0.48	1	U	R.LFLGHTAPVISIAVCPDGR.W
	415	675.0257	2022.0554	2022.0721	-8.27	0	46	0.02	1	U	R.LFLGHTAPVISIAVCPDGR.W
	448	1074.5279	2147.0413	2147.0535	-5.68	0	(11)	66	1	υ	R.WLSTGSEDGIINVWDIGTGK.R
\checkmark	449	1074.5291	2147.0436	2147.0535	-4.60	0	119	1e-009	1	U	R.WLSTGSEDGIINVWDIGTGK.R
\checkmark	450	716.6885	2147.0436	2147.0535	-4.60	0	(65)	0.00026	1	υ	R.WLSTGSEDGIINVWDIGTGK.R
V	580	900.0725	2697.1958	2697.2200	-8.96	0	41	0.017	1	U	R. TNNAAGANSGQQPQQQSQGQSQQQGR.S
✓	626	1026.8220	3077.4442	3077.4717	-8.93	0	62	0.00022	1	U	K.ATTEPSAEPDEPFIGYLGDVTASINQDIK.E
V	629	627.6931	3133.4294	3133.4543	-7.97	0	(106)	5.4e-009	1	U	K.GHNHPVWDVSFSPLGHYFATASHDQTAR.L
\checkmark	630	784.3650	3133.4309	3133.4543	-7.48	0	112	1.6e-009	1	U	K.GHNHPVWDVSFSPLGHYFATASHDQTAR.L
✓	633	1048.8174	3143.4302	3143.4465	-5.19	1	80	2.2e-006	1	U	K.IWSLDGSSLNNPNIALNNNDKDEDPTCK.T
V	641	1069.5186	3205.5341	3205.5667	-10.17	1	65	0.00013	1	U	K.KATTEPSAEPDEPFIGYLGDVTASINQDIK.E
V	680	971.2566	3880.9973	3881.0405	-11.14	0	54	0.00084	1	U	K.NWVDSSLEIYKPELSYIMYPIFIYLFLNLVAK.N
V	708	1146.5968	4582.3582	4581.4061	208	1	1	1e+002	1	U	K.NWVDSSLEIYKPELSYIMYPIFIYLFLNLVAKNPVYAR.R
			1.00051				0.5 (1)			244161	

TAF2 YEAST Mass: 162851 Score: 701 Matches: 26(17) Sequences: 24(16) emPAI: 0.52
Transcription initiation factor TFIID subunit 2 OS=Saccharomyces cerevisiae (strain ATCC 204508 / S288c) GN=TAF2 PE=1 SV=3

 \square Check to include this hit in error tolerant search or archive report

Q	uery	Observed	Mr(expt)	Mr(calc)	ppm	Miss	Score	Expect	Rank	Unique	Peptide
~	41	481.7412	961.4679	961.4902	-23.22	0	48	0.021	1	U	R. LAACEALSK. Y
~	56	506.2532	1010.4918	1010.5073	-15.36	0	49	0.014	1	U	K. VVGEEGFFK.S
~	59	510.7541	1019.4936	1019.5135	-19.47	0	27	2.7	1	U	R.TSESNELLK.Q
~	104	581.8168	1161.6191	1161.6394	-17.45	0	35	0.48	1	U	K.ELPHPIDLTK.K
~	119	601.8460	1201.6774	1201.6958	-15.29	0	36	0.35	1	U	R.LLYPLEVIDK.A
~	124	607.2935	1212.5725	1212.6099	-30.81	0	63	0.00037	1	U	K.SSVQSVHNEVK.N
✓	150	636.8050	1271.5954	1271.6106	-11.91	0	60	0.00069	1	U	R.NIEESNNPSLR.D
~	169	648.3343	1294.6540	1294.6744	-15.71	0	36	0.28	1	U	K.LYFLQCNIPK.Y
~	172	651.3455	1300.6764	1300.6921	-12.11	0	83	7.6e-006	1	U	R.QNISGLIQICR.D
~	173	651.7880	1301.5614	1301.5744	-10.01	0	22	1.6	1	U	R.TECFTGSMTIR.I
	200	680.8173	1359.6200	1359.6347	-10.78	0	58	0.00087	1	U	K.YVYDPDFTGGVK.H
✓	000	721.3860	1440.7574	1440.7799	-15.62		43	0.053			R.VMYTLINSFVVR.L
\checkmark	239	742.8691	1440.7574	1440.7799	-15.62			0.003	_	Ū	
Z	256						63			Ū	R.ESFQNEFLMVLK.I
$\overline{\mathbf{v}}$	263	750.8417	1499.6688	1499.6780	-6.09		78	5.9e-006	_	Ū	K.FASLNEYPETDSK.S
$\overline{\mathbf{v}}$	266	753.3569	1504.6993	1504.6915	5.18		47	0.014		Ū	K. HMD FAALGICNTR.L
✓	292	793.8572	1585.6998	1585.7116	-7.46		55	0.00099		Ü	R.DVIVCCSEYSNIK.E
_	381		1908.9339	1907.9629	509		10	83		σ	K.QFLLDILVYNENGENK.Y
✓	384	639.6462	1915.9167	1915.9428	-13.64		54	0.0032		U	R.IHEHDGTPYEHIVEIK.D
✓	392	979.4905	1956.9665	1956.9832	-8.53	0	69	0.00012	1	U	R.YENLVNWLSSYESLIK.T
✓	422	1028.0936	2054.1726	2054.1928	-9.82	. 0	0	3.4e+002	1	U	K.ILLWDVLNLPVLSLYQR.K
~	435	704.9803	2111.9190	2111.9357	-7.94	0	53	0.0011	1	Ū	K.SEDDIELFLSGHYVDDMK.I
✓	443	1070.5364	2139.0582	2139.0789	-9.68	0	95	2.4e-007	1	U	K.LENFFNEWVYGSGVPILR.V
V	444	714.0267	2139.0582	2139.0789	-9.68	0	(84)	3.3e-006	1	U	K.LENFFNEWVYGSGVPILR.V
~	446	716.3739	2146.0999	2146.1157	-7.37	0	(20)	8.2	1	σ	K. ISLEDANALSNYTPITPSIK.T
✓	447	1074.0572	2146.0999	2146.1157	-7.37	0	81	7.5e-006	1	σ	K. ISLEDANALSNYTPITPSIK. T
V	699	1055.4923	4217.9400	4217.9713	-7.41	. 0	33	0.067	1	σ	R.CDQFIHDDPLQTNLNGLTSQNVLYSDNSIEQSHFLR.S
_											_

TAF14 YEAST

Mass: 27423 Score: 605 Matches: 13(11) Sequences: 9(8) emPAI: 2.53

```
Transcription initiation factor TFIID subunit 14 OS=Saccharomyces cerevisiae (strain ATCC 204508 / S288c) GN=TAF14 PE=1 SV=1
\hfill\square Check to include this hit in error tolerant search or archive report
               Observed Mr(expt) Mr(calc)
                                                                  ppm Miss Score
-8.53 0 25
                                                                                            Expect Rank Unique Peptide
               455.7332 909.4518 909.4596
777.3662 1552.7178 1552.7217
                                                                                    25 3.6 1
106 1.6e-008 1
                                                                                                                               K. SLWDYVK.K
                                                                  -2.51
                                                                                                                              K.SGSTEETTANTGTIGK.R
                                                                                             0.00015
                                                                -12.64
               560.2915 1677.8527 1677.8739
                                                                                                                               K. VIYHLHPTFANPNR. T
X X X X X X X
                                                                                   69 0.00015 1 U K.VIYHLHPTFANPNR.T
149 1.2e-012 1 U K.LMEDDLVGVVQMVTDNK.T
(74) 3.6e-005 1 U K.LNEDDLVGVVQMVTDNK.T
77 1.6e-005 1 U K.TQQHLLPEVPPVENFPVR.Q
(18) 12 1 U K.TQQHLLPEVPPVENFPVR.Q
(50) 0.0084 1 U R.IEEQGWGGFPLDISVFLLEK.A
55 0.0022 1 U R.IEEQGWGGFPLDISVFLLEK.A
60 0.00059 1 U R.QWSIEIVLLDDEGKEIPATIFOK.V
88 5.8e-007 1 U K.TPMNVTNNVEGEFIIDLYSLPEGLLK.S
(44) 0.0073 1 U R.KIPHDLNFLQESYEVENYIQIPLNEPLLTEELAK.S
                                                                                      69
               944.9662 1887.9178 1887.9248
                                                                 -3.73
               630.3138 1887.9197 1887.9248
      430
               700.7105 2099.1097 2099.1164
                                                                  -3.17
      431 1050.5637 2099.1129 2099.1164
                                                                              0 (18)
                                                                  -1.64
               759.7246 2276.1521 2276.1729
                                                                  -9.15
      486 1139.0833 2276.1521 2276.1729
                                                                  -9.14 0
               887.1247 2658.3522 2658.3792
                                                                -10.17
      572
      635
             1055.5184 3163.5335 3163.5635
                                                                 -9.48
      689 1000.2885 3997.1249 3997.1564
                                                                             1 (44)
              800.4322 3997.1249 3997.1564 -7.88 1 47
                       Mass: 57980 Score: 550 Matches: 17(11) Sequences: 13(9) emPAI: 1.29
    TAF6 YEAST
    Transcription initiation factor TFIID subunit 6 OS=Saccharomyces cerevisiae (strain ATCC 204508 / S288c) GN=TAF6 PE=1 SV=1
☐ Check to include this hit in error tolerant search or archive report

        Observed
        Mr(expt)
        Mr(calc)
        ppm
        Miss Score

        546.7649
        1091.5153
        1091.5347
        -17.76
        0
        43

                                                                                               Expect Rank Unique Peptide

0.043 1 U R.DVLTTDDVSK.A
               573.3041 1144.5936 1144.6088 -13.25
                                                                                      53
                                                                                                0.008 1
                                                                                                                              K.GVSVLEGESIR.F
V
                                                                                      58
               578.3486 1154.6827 1154.6910
                                                                 -7.22
                                                                                                0.001 2
                                                                                                                       U
                                                                                                                              R. ILEITEOAVK. F
               604.2895
                             1206.5645
                                               1206.5743
                                                                  -8.15
                                                                                      50
                                                                                               0.0087
                                                                                                                               R. VFGTYYGCLK.G
8888888888
                                                                                                   0.9 1
               622.8315 1243.6484 1243.6747 -21.20
                                                                                      32
                                                                                                                              R CGVTTGFHTLK R
                                                                -12.11 0 42 0.069 1 U R.FFLGNLNNWAR.L
-11.25 0 78 1.9e-005 1 U R.DFAASLLDYVLK.K
-8.58 0 48 0.0063 1 U K.DDSPQEHEFLER.T
-16.31 0 (29) 0.58 1 U K.EETQILVDTVISALLVLK.K
-9.44 0 92 2.7e-007 1 U K.EETQILVDTVISALLVLK.K
-8.78 0 (72) 2.5e-005 1 U K.EETQILVDTVISALLVLK.K
-3.06 0 75 2.1e-005 1 U R.VLNVEPLYGYDGSEVNK.A
-2.64 0 132 2.5e-011 1 U R.LVFNESGITLDNIEEHLNDDSNPTR.T
-1.64 0 (67) 7.6e-005 1 U R.LVFNESGITLDNIEEHLNDDSNPTR.T
-4.90 0 21 2.7 1 U R.LVFNESGITLDNIEEHLNDSNPTR.T
-4.90 0 21 0.065 1 U R.LVFNESGITLDNIEEHLNDSNPTR.T
-6.95 0 32 0.065 1 U R.LVFNESGITLDNIEEHLNDSNPTR.T
      193
194
               676.3407 1350.6669 1350.6833 -12.11
                                                                                                 0.069 1
                                                                                                                              R. FFLGNLNNWAR. L
               677.8587 1353.7028 1353.7180
      298
               807.8664 1613.7183 1613.7321
               662.0466 1983.1180 1983.1503
                                                                -16.31
      401
      402
               992.5731 1983.1316 1983.1503
               662.0516 1983.1329
                                               1983.1503
      403
             1030.0014 2057.9883 2057.9946
               948.1187 2841.3342 2841.3417
      606
               711.3415 2841.3370 2841.3417

    634
    790.1714
    3156.6565
    3156.6720
    -4.90
    0
    21

    717
    1010.3225
    5046.5759
    5046.6110
    -6.95
    0
    32

   <u>TAF1 YEAST</u> Mass: 120849 Score: 537 Matches: 15(11) Sequences: 13(10) emPAI: 0.45
   Transcription initiation factor TFIID subunit 1 OS-Saccharomyces cerevisiae (strain ATCC 204508 / S288c) GN-TAF1 PE=1 SV-1
Check to include this hit in error tolerant search or archive report
                                                                   ppm Miss Score Expect Rank Unique Peptide
                               Mr(expt)
                                                Mr(calc)
                                                                                                0.003 1
0.099 1
V
               642.3735 1282.7324 1282.7496 -13.37 0
645.8135 1292.6367
               551.2828 1100.5511 1100.5713 -18.37
                                                                                                                              K. LLQLELANLEK. S
            642.3735 1282.7324 1282.7496 -13.37 0 39 0.099 1 U K.LLQLELANLEK.S
645.8135 1289.6125 1289.6324 -15.42 0 37 0.19 1 U K.NNLLQSNSSASR.R
433.8928 1298.6557 1298.6942 -28.90 1 32 0.67 1 U R.KANEQDTLRPK.L
673.8454 1345.6763 1345.6878 -8.53 0 46 0.037 1 U R.KIDISGTDFLITK.S
746.4012 1490.7878 1490.8093 -14.40 0 71 9.9e-005 1 U K.LEVGETHVLGVQDK.S
497.9366 1490.7879 1490.8093 -14.39 0 (40) 0.11 1 U K.LEVGETHVLGVQDK.S
778.9121 1555.8097 1555.8246 -9.58 0 58 0.0017 1 U K.SEVETHVLGVDK.S
579.6605 1735.9598 1735.9985 -22.26 1 41 0.054 1 U R.RGLIHVSIDELFPIK.E
889.8990 1777.7835 1777.7966 -7.38 0 123 1.7e-010 1 U R.TENSYDNGSDLAGYTDGK.A
996.4696 1990.9246 1990.9371 -6.30 0 83 3.1e-006 1 U K.TISEDLLIATDDMQEK.I
765.7499 2294.2278 2294.2481 -8.87 0 (66) 0.00017 1 U K.QQLDSSNLILPLNETILQQK.F
774.3663 2320.0770 2320.0981 -9.08 0 78 7.1e-006 1 U R.AMICJIHOVEDTFCCGGGFSFIK.T
8856.0997 2565.2774 2565.2976 -7.86 0 87 1.1e-006 1 U R.AMICJIHGVGDFTCCGGGFSFIK.T
259
      283
      336
      405
\overline{\mathbf{v}}
      491
    TAF3 YEAST Mass: 40385 Score: 444 Matches: 13(9) Sequences: 13(9) emPAI: 1.03
Transcription initiation factor TFIID subunit 3 OS=Saccharomyces cerevisiae (strain ATCC 204508 / S288c) GN=TAF3 PE=1 SV=1
☐ Check to include this hit in error tolerant search or archive report
   Query
               Observed Mr(expt) Mr(calc)
                                                                   ppm Miss Score
                                                                                               Expect Rank Unique Peptide
                                                 926.6164 -24.54
                464.3041
                                926.5937
                                                                                                                               R. ISILOLLK. A
                                                                                               0.021 1
               454.2053 1359.5941 1359.6280 -24.94
V
                                                                                                                              R. HHHTTITNEDR. M
               737.8634 1473.7123 1473.7252
                                                                  -8.78
                                                                                              0.00047
                                                                                                                               M. TTNNDFYFALLR. I
                                                                                      63
               835.9597 1669.9049 1669.9138
                                                                  -5.32
      313
                                                                                      86 2.7e-006
                                                                                                                              R. ITALPTVELLQSEEK.E
                                                                                                                               R. ARPSLVDVMTDLYAK.F
               839.9336 1677.8527 1677.8760
                                                                -13.86
                                                                                            6.8e+002
∀
               846.4618 1690.9089 1690.9254
                                                                 -9.70
                                                                                    109 1.2e-008 1
                                                                                                                              K. FLSLLASEVSSIAQAR. C
                968.4576 1934.9007 1934.9109
             1058.0212 2114.0278 2114.0531 -11.97
                                                                                      55
                                                                                               0.0026 1
                                                                                                                              K TELTEDITINNIGLODWIK I
                                                                                               1e+002 1
75 1
.8e-006 1
             1079.5466 2157.0786 2157.0953
                                                                                                                              K.ESDPLSAIPDYLNQLLONK.G
      453
               748.3780 2242.1120 2242.1481 -16.09 1 10
940.4421 2818.3045 2818.3396 -12.44 0 75
                                                                                                                              R.KTELIEDLINNNGLDDWIK.L
      478
                                                                                     75 9.8e-006 1
                                                                                                                              R.LENITLSFEDEELESLGEVEGPNOK.S
      602
             953.2489 3808.9664 3808.9985 -8.44 1 15 7.4 1
1141.7995 4563.1689 4563.2174 -10.62 0 100 1.2e-008 1
                                                                                                                      U R.ITALPTVELLQSEEKESDPLSAIPDYLNQLLQNA.G
U R.CDQDDTIALQDITLALENLGIVXPTNVLDVYDENSELSSSR.G
      676
```

TAF12 YEAST

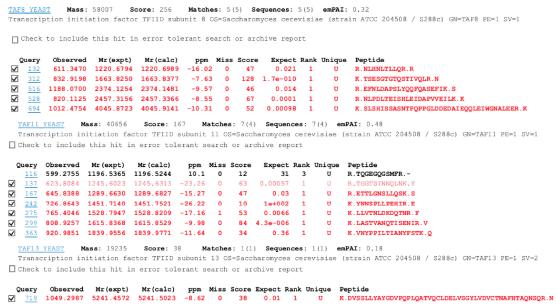
```
Mass: 61150 Score: 425
                                                   Matches: 14(10) Sequences: 14(10) emPAI: 0.69
   Transcription initiation factor TFIID subunit 12 OS=Saccharomyces cerevisiae (strain ATCC 204508 / S288c) GN=TAF12 PE=1 SV=1
\square Check to include this hit in error tolerant search or archive report
  Ouerv
           Observed Mr (expt)
                                    Mr(calc)
                                                 ppm Miss Score
                                                                      Expect Rank Unique Peptide
                                    873.4708 -22.29
            437.7330
                       873.4514
                                                                                             K. TPAPVAYR. S
                                                               52
                                                                      0.012
                                                            30
           437.7330 873.4514 873.4708 -22.29 0
545.7853 1089.5561 1089.5720 -14.53 0
    76
                                                                        1.5 1
                                                                                       U
                                                                                             K. LWONFOVR. H
V
V
   TAF10 YEAST Mass: 23005
                                   Score: 369 Matches: 6(4) Sequences: 5(3) emPAI: 0.97
   Transcription initiation factor TFIID subunit 10 OS=Saccharomyces cerevisiae (strain ATCC 204508 / S288c) GN=TAF10 PE=1 SV=1
\square Check to include this hit in error tolerant search or archive report
                                    Mr(calc)
                                                 ppm Miss Score Expect Rank Unique Peptide
  Query Observed Mr(expt)
                                                976 0
-2.75 0
                                                                        0.27 1
e-009 1
           496.7347
                       991.4548
                                    990.4883
                                                               34
                                                                                             K. NGFNVADVR. V
                                                             111 3.3e-009
    419 1026.9763 2051.9380 2051.9436
                                                                                             R.EAVVDDGSENAFGIPEFTR.K
                                               934.1436 2799.4090 2799.4012
     601
           956.8307 2867.4702 2867.4817
           717.8759 2867.4747 2867.4817
     611
    655 1118.5522 3352.6348 3352.6710 -10.78 1
                Mass: 42338 Score: 328 Matches: 10(8) Sequences: 10(8) emPAI: 0.83
   Transcription initiation factor TFIID subunit 4 OS=Saccharomyces cerevisiae (strain YJM789) GN=TAF4 PE=3 SV=1
$\int \text{Check to include this hit in error tolerant search or archive report
  Query Observed Mr(expt) Mr(calc)
                                                ppm Miss Score Expect Rank Unique Peptide
                                  V
          444.7412
                      887.4679
                                                                                           R.ASNVTAGLR.A
                                                             20
                                   987.5461 -24.10
                      987.5223
                                                                    0.0045
          494.7684
                                                              56
                                                                                           R.RSEVSAALR.A
\checkmark
          550.2655 1098.5164 1098.5305
                                              -12.84
                                                              65
                                                                   0.00023
                                                                                           K.IDSEETLHR.A
    103 596.2965 1190.5785 1190.5931 -12.31 0 52 0.0076
127 607.8511 1213.6877 1213.7030 -12.65 0 65 0.00035
265 752.8698 1503.7250 1503.7416 -11.01 0 84 3.5e-006
290 790.9084 1579.8023 1579.8206 -11.55 0 59 0.0015
388 646.3383 1935.9930 1936.0054 -6.42 0 90 8.4e-007
                                                                              1 U
\
\
\
                                                                                           K.EONFNLTPTK.N
                                                                                           R.DILTNAIVISR.H
                                                                                           R.EEEALLNSSINASK.S
                                                                              1 U K.ASELSHSLPSPSQIK.S
1 U K.QYGWLTSSVNKPTSLGAK.S
                                                                                           K.ASELSHSLPSPSOIK.S
                                                                                    U K.IPNHLPFLHPEQVSNYMR.K
U K.STAHVSSTHNDAAGNTDDSVLPK.N
          731.3647 2191.0723 2191.0997 -12.48 0
                                                                              1
    469
    499 775.3592 2323.0558 2323.0677 -5.12 0 80 3.7e-006 1
                Mass: 17361
                                 Score: 312 Matches: 6(5) Sequences: 5(4) emPAI: 1.44
  Transcription initiation factor TFIID subunit 9 OS=Saccharomyces cerevisiae (strain ATCC 204508 / S288c) GN=TAF9 PE=1 SV=1
☐ Check to include this hit in error tolerant search or archive report

        Mr (expt)
        Mr (calc)
        ppm
        Miss
        Score
        Expect
        Rank

        807.4321
        807.4491
        -21.01
        0
        1
        1.3e+003
        7

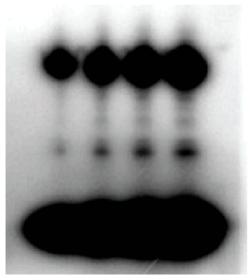
        1313.6746
        1313.6914
        -12.78
        0
        66
        0.00035
        1

  Query Observed
                                                                    Expect Rank Unique Peptide
          404 7233
                                                                                           R. YTQGVLK.D
    181
           657.8446 1313.6746 1313.6914 -12.78
                                                                                      U
                                                                                            K. ALPQVMGTWGVR. L
                                                              111 2.9e-009
    427 1037.9741 2073.9337
                                 2073.9451 -5.50
                                                                                            K.NSVGSVSEVGPDSTQEETPR.D
V
                                                                                1
                                                                    2.9e-009 1 U
1.7e-010 1 U
0.0024 1 U
                                                                                            K.DALVYNDYAGSGNSAGSGLGVEDIR.L
          834.0529 2499.1368 2499.1514
                                               -5.82
                                                         0 123 1.7e-010
          829 6808 3314 6939 3314 7234
                                               -8.88 0 (52)
-8.87 0 59
                                                                                            R LIHILLASOSTHOYEDOVPLOLMDFAHR Y
          663.9461 3314.6940 3314.7234
                                                              59 0.00051 1
                                                                                           R.LLHLLLASQSIHQYEDQVPLQLMDFAHR.Y
    651
                                                                                      U
  <u>TAF7 YEAST</u> Mass: 67571 Score: 263 Matches: 7(7) Sequences: 7(7) emPAI: 0.39
   Transcription initiation factor TFIID subunit 7 OS-Saccharomyces cerevisiae (strain ATCC 204508 / S288c) GN=TAF7 PE=1 SV=1
Check to include this hit in error tolerant search or archive report
         Observed Mr (expt) Mr (calc) ppm Miss Score 626.8319 1251.6491 1251.6724 -18.57 0 45
  Query Observed Mr(expt) Mr(calc)
                                                                   Expect Rank Unique Peptide
                                                                                          K.HGISPPLYNVR.N
                                                                   0.041 1 U
0.00045 1 U
                                             -14.66
          627.8289 1253.6432 1253.6615
                                                                                           K.EEIHTIASAVGK.O
    141
         652.3203 1302.6261 1302.6416 -11.87 0 60 0.001 1 U K.QLQQTEDSVQK.Q 657.8786 1313.7427 1313.7595 -12.76 0 59 0.0013 1 U R.ILPDIQLEFVK.N 698.3285 1394.6424 1394.6565 -10.14 0 69 8.9e-005 1 U K.QAEEVSYDLVDK.S 735.3540 1468.6933 1468.7045 -7.61 0 94 3.2e-007 1 U K.NSLESGDYSGISIK.W 802.7369 2405.1889 2405.2074 -7.68 0 72 4.9e-005 1 U R.QHTELLADELNELETTLAHTK.H
          652.3203 1302.6261 1302.6416 -11.87
                                                                     0.001
                                                                                           K.QLQQTEDSVQK.Q
                                                              60
```

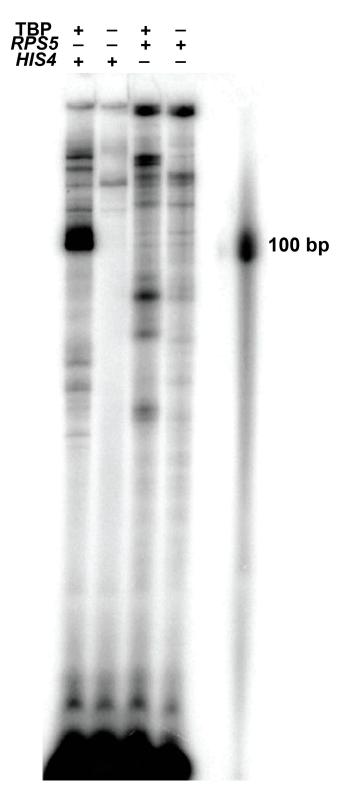


Supplementary Figure S2. Mass spectrometry results showing that all 14 TAFs are present in the purified complex.

pmol TBP 1 2 3 4

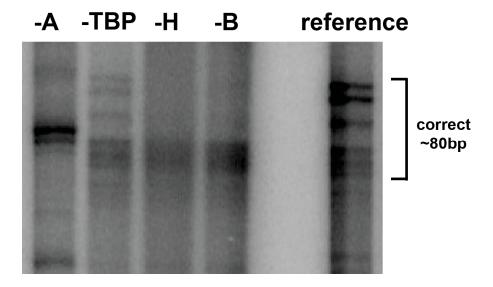


Supplementary Figure S3. EMSA in 2% agarose gel for TBP on *RPS5*. TBP alone binds *RPS5* forming at least two specific complexes with one or more TBP molecules bound.



Supplementary Figure S4. Positive and negative controls for transcription run-off assays. Lane 1: Run-off products from the *HIS4* TATA promoter to assess the activity of purified GTFs without the TAF complex. Lane 2: Negative control; same as Lane 1 minus TBP and TAFs. Lane 3: Run-off products from the *RPS5* TATA-less promoter in the presence of TBP only (minus TAFs). This establishes the TBP-directed transcription background. Lane 4: Negative control to establish *RPS5* background transcription (minus TBP minus TAFs). Comparing Lanes 3 and 4 reveals the strongest top band that is much longer than 100 bp, inconsistent with the mRNA products detected in vivo. This band corresponds to an artificial

transcript from a TSS located approximately 25 bp downstream of the pseudo-TATA box. Rightmost lane: 100 bp ladder.



Supplementary Figure S5. Negative controls for transcription run-off assays on *RPS5* with TAFs present. Lane 1: Omitting TFIIA. Lane 2: Omitting TBP. Lane 3: Omitting TFIIH. Lane 4: Omitting TFIIB. Faint correct bands are observed when TBP is omitted, which we attribute to the 3% contamination of TBP in our TAF complex preparation.