



Supplemental Figure 1. Analysis of the short (U5S) and long (U5L) forms of *C. albicans* U5 snRNA. 3' RACE products were resolved on 1X TBE, 3% NuSieveGTG agarose gels (Lonza) and stained with ethidium bromide. Product sizes represent fusions of both the 3' ends of U5 snRNAs and the 5' end of 18S rRNA (see Materials and Methods). The first two lanes contain different loadings of the same sample; the third lane contains unrelated restriction digest products of known size.

Sequence information

I. Sequences of oligonucleotides used for analysis of snRNA 3' ends.

Reverse-transcription of snRNA/18S rRNA fusions

5'-CCACGGTTATCCAAGTAG-3'

Primary PCR

18S rRNA: 5'-TAGCGGCCGACACGGTTATCCAAGTAGTAAGG-3'

U1 snRNA: 5'-TATCTAGAATTTGATGGAGGCTCTGGTG-3'

U2 snRNA: 5'-TATCTAGAACATAGTGTTCGTTGCCACTG-3'

U4 snRNA: 5'-GGCATTACGTGTATCAGTG-3'

U5 snRNA: 5'-CGCCAGAAGATCAATTTTCAG-3'

U6 snRNA: 5'-CATTTCCCCTGCATAAGGAC-3'

Nested PCR and sequencing

18S rRNA: 5'-TATCTAGATCCAAGTAGTAAGGTAAGTACTATC-3'

U1 snRNA: 5'-TAGCGGCCGCGGAGGCTCTGGTGATGTTTC-3'

U2 snRNA: 5'-TAGCGGCCGCTGTTCGTTGCCACTGTACTTT-3'

U4 snRNA: 5'-TAGCGGCCGCCGTGTATCAGTGAGGATTCG-3'

U5 snRNA: 5'-TAGCGGCCGCAGAAGATCAATTTTCAGTTTACC-3'

U6 snRNA: 5'-TAGCGGCCGCCCTGCATAAGGACGGAACG-3'

II. Yeast snRNA sequences.

With the exception of the *S. cerevisiae* snRNAs and the *C. albicans* snRNA 3' ends, the reported sequences are based on computational rather than experimental analyses, and the precise sequence termini are therefore predictions. In addition to hemiascomycete snRNAs, we include U1 snRNAs from more distantly related yeasts, as their identification required searching by methods other than BLAST (see Results and Discussion). *Y. lipolytica*, *A. nidulans* and *N. crassa* each have more than one gene encoding U1 snRNA; as the U1 genes within these species are highly similar to each other, we report only one representative for each.

Predicted snRNAs of hemiascomycetes listed in Figure 2

>*Saccharomyces cerevisiae*_U1_snRNA

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>*Candida glabrata*_U1_snRNA

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>*Candida parapsilosis*_U2_snRNA

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>*Candida_albicans*_U5_snRNA
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>*Candida_tropicalis*_U5_snRNA
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>*Lodderomyces_elongisporus*_U5_snRNA
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TTTTTGGAAATTTTATCATTTAGTTTGGATT

>*Candida_parapsilosis*_U5_snRNA
CACACCAGAAGATCAATTTCACTCAACGAACATGGTTCTTGTCTTTTCCAGAACCATCCGGGAATGTTCTTCCGTTTTAAGTCAAATGGTGTTTTAAATG
TTTTAATTTTTTGGAAACCTTTTTCAACTTTTTGAGTTT

>*Clavispora_lusitaniae*_U5_snRNA
ATGACGCCAGAAGATCAGTTTCTTAAAGCGTACATGGTTCTTGCCTTTTACCAGAACCATCCGGGAACCTGTTGCTAATGGTGTTTTTTTTCAATTTTT
GGAACCTCCCATGTGCTAAATCATTTATGATTAGCCATT

>*Pichia guilliermondii*_U5_snRNA
 CTGGCGCCAGAGATCAATATCTATCGTACATGGTCTTGCCTTTTACCAGAACCATCCGGGTATTGTCTTTATATGGTGCTCGCTATTTTTTGGAACCT
 TCTCATGATGCTTTGCATCAGT
 >*Debaryomyces hansenii*_U5_snRNA
 ATCACCAGAAGATCAATTTCAAATCGTACATGGTCTTGCCTTTTACCAGAACCATCCGGGAATGTCTTCACTACTGGTGTCTTCACTATTTTTTGGAA
 ACCTTTTTCTTTATATTAAGATTTATCTAGTATAT
 >*Yarrowia lipolytica*_U5_snRNA
 CAACAACGGAGGTCGACATCGACGTACATGGCTCTTGCCTTTTACCAGAGCCATCCGGGTGTCGTCTCTACAAGTTGTTTTCTAGTTTTTGGAACTTC
 TTCTTATGGAGACAAGT

 >*Saccharomyces cerevisiae*_U6_snRNA
 GTTCGCGAAGTAACCTTCGTGGACATTTGGTCAATTTGAAACAATACAGAGATGATCAGCAGTTCCCCTGCATAAGGATGAACCGTTTTACAAAGAGAT
 TTATTTTCGTTTT
 >*Candida glabrata*_U6_snRNA
 GTCCTTGAAGTAACCTTCTTGGACATTTGGTCAATTTGAAACAATACAGAGATGATCAGCAGTTCCCCTGCATAAGGATGAACCGTTTTACAAAGAGAT
 TTATTTTCGTTTT
 >*Kluyveromyces lactis*_U6_snRNA
 GTCCATATTACCTCCGTGGTTTTATGGACATTTGGTCAATTTGAAACAATACAGAGATGATCAGCAGTTCCCCTGCATAAGGATGAACCGTTTTACAAA
 GAGATTTAAGATTTT
 >*Kluyveromyces waltii*_U6_snRNA
 GTCCCGCTCATTTCCGGTGGCGTGGACATTTGGTCAATTTGAAACAATACAGAGATGATCAGCAGTTCCCCTGCATAAGGATGAACCGTTTTACAAAGAG
 ATTTACAAGTTTT
 >*Saccharomyces kluyveri*_U6_snRNA
 GTCCAAGACATTTCCGTGTTTTGGACATTTGGTCAATTTGAAACAATACAGAGATGATCAGCAGTTCCCCTGCATAAGGATGAACCGTTTTACAAAGAGA
 TTTACTTCAATTT
 >*Candida albicans*_U6_snRNA
 GTTGCGCGTTCGGAACCTTGTCAACTTTAAAATTACAGAGAAAATTAGCATTTCCCCTGCATAAGGACGGAACCGTTTTACAAAGAGATTTACCATTTTT
 >*Candida dubliniensis*_U6_snRNA
 GTTGCGCGTTCGGAACCTTGTCAACTTTAAAATTACAGAGAAAATTAGCATTTCCCCTGCATAAGGACGGAACCGTTTTACAAAGAGATTTAACATTTTT
 >*Candida tropicalis*_U6_snRNA
 GTCGCCGTTTCGGAACCTTGTCAAATTTAAAATTACAGAGAAAATTAGCATTTCCCCTGCATAAGGACGGAACCGTTTTACAAAGAGATTTACAACATTTTT
 >*Lodderomyces elongisporus*_U6_snRNA
 GTACTATCTTCGGATAGTACATTTGTCAATTTAACAATACAGAGAAGATTAGCATTTGCTCTGCATAAAGATGACACGCTTTACAAAGAGATTTACAGT
 TTTT
 >*Candida parapsilosis*_U6_snRNA
 GTATTATCTTCGGATAGTACATTTGTCAAATTTAACAATACAGAGAAGATTAGCATTTGCTCTGCATAAAGATGACACGCTTTACAAAGAGATTTACCAT
 TTTT
 >*Clavispora lusitaniae*_U6_snRNA
 GTACTATTGTTTCGCAATAGTACATCTGTCAATTTTAAACAATACAGAGAAGATTAGCATTTGCTCTGCATAAAGATGACACGCTATACAAAGAGATTTACC
 ATTTTT
 >*Pichia guilliermondii*_U6_snRNA
 GTACTATCGTTTCGCGATAGTACATTTGTCAATTTTAAACAATACAGAGAAGATTAGCATTTGCTCTGCATAAAGATGACACGCTTTACAAAGAGATTTACC
 ATTTTT
 >*Debaryomyces hansenii*_U6_snRNA
 GTACTATCCTTCTGGATAGTACATTTGTCAATTTTAAACAATACAGAGAAGATTAGCATTTGCTCTGCATAAAGATGACACGCTTTACAAAGAGATTTAAC
 CATTTTT
 >*Yarrowia lipolytica*_U6_snRNA
 GTCCTTCGGGACATATGGTCAATTTGAAAAAATACAGAGAAGATTAGCATGGCCCTGCATAAGGATGACACGCTTTACAAAGAGATTTAAACCGTTTTT

Other yeast U1 snRNAs

>*Aspergillus nidulans*_U1_snRNA
 ATACTTACCTTGTGGTGGCTGCGATCAAGAAGCGGCCACCACAGACTGGTCCCTGCATTGCACAGCGGGCGGAACGGTCTGTTCAACGGCCTTC
 GGGTCATTGACAGGCGTATTCTTTGGCACTTTCC
 >*Coccidioides immitis*_U1_snRNA
 ATACTTACCTTGTCTCGGAAACCGCGATCATGAAGCGGGCTCCCATGAGATGGTCCCTGCATTGCACAGCGGGCGGACGCGTCTGTTTCATCGGCCTT
 CGGGTCTTTGAGAGCGTAATTTTACTCCCTTC
 >*Histoplasma capsulatum*_U1_snRNA
 ATACTTACCTTGTGGGCATCCGCGATCAAGAAGCGGTCTGCCGTGGAGGGCTCCTACATTGCACATCGTGGCGAGCCTTGCCACTCAACATCCTTC
 GGGGTTTTGACAGGCATATTCTTTGGCTCCCTTCT
 >*Magnaporthe grisea*_U1_snRNA
 ATACTTACCTTGTGGCCGAGTTCCTGATCAAGAAGACGGAGCCGGAGACCTGCATTGCACACCGTGGCGTCGACCGTTCTGGTTGTCTCT
 TCGGGGCCAACCTGGCGCAATTTTGTATAACCCACTCTTTTC
 >*Neurospora crassa*_U1_snRNA
 ATACTTACCTTGGTTCGATTGCGCGGAGATCAAGAACCCTGATGATGGCGGAGGGCTGCATTGCACATCGTGGTGCCAGCCGCATGAATTGCTCTT
 CGGGGCGTTCCGGCCGTAATTTTGTATGTCAATCC
 >*Uncinocarpus reesii*_U1_snRNA
 ATACTTACCTTGTCTCGGAAACCGCGATCATGAAGCGGGCTCCCATGAGATGGTCCCTGCATTGCACAGCGGGCGGACTCGTCTGTTTCATCGGCCTT
 CGGGTCTTTGAGAGGCGCAATTTTACTCTTTACTT