

# High throughput Identification of Clinical Pathogenic Fungi by Hybridization to an Oligonucleotide Microarray

Aihua Huang<sup>1,2</sup>, Jun-Wen Li<sup>1\*</sup>, Zhi-Qiang Shen<sup>1</sup>, Xin-Wei Wang<sup>1</sup>, Min Jin<sup>1</sup>

<sup>1</sup>Institute of Environment and Health, No.1, Dali Road, Tianjin, 300050, P. R. China

<sup>2</sup>Medical College of Chinese People's Armed Police Forces, Tianjin, 300162, P. R. China

## Supplementary information 1

The accession number(s) for design of probes in GenBank (<http://www.ncbi.nlm.nih.gov/geo>) are followed:

### *C. albicans*

gi|49409546|gb|AY560106.1|  
gi|49409540|gb|AY560105.1|  
gi|49409535|gb|AY560104.1|  
gi|49409528|gb|AY560103.1|  
gi|49409526|gb|AY560102.1|  
gi|49409524|gb|AY560101.1|  
gi|49409520|gb|AY560099.1|  
gi|50404254|gb|AY672930.1|  
gi|21666917|gb|AF455483.1|  
gi|29423779|gb|AY230142.1|  
gi|17646392|gb|AF441200.1|  
gi|14211564|dbj|AB049120.1|  
gi|14211566|dbj|AB049122.1|

### *C. parapsilosis*

gi|38015982|dbj|AB109292.1|  
gi|38015981|dbj|AB109291.1|  
gi|38015980|dbj|AB109290.1|  
gi|38015979|dbj|AB109289.1|  
gi|38015978|dbj|AB109288.1|  
gi|38015977|dbj|AB109287.1|  
gi|38015976|dbj|AB109286.1|  
gi|38015975|dbj|AB109285.1|  
gi|38015974|dbj|AB109284.1|  
gi|38015973|dbj|AB109283.1|  
gi|38015972|dbj|AB109282.1|  
gi|38015971|dbj|AB109281.1|  
gi|38015965|dbj|AB109275.1|  
gi|38015961|dbj|AB109271.1|

### *C. krusei*

gi|50593490|gb|AY679093.1|  
gi|7739802|gb|AF262033.1|  
gi|12862855|dbj|AB054034.1|  
gi|21666828|gb|AF455401.1|  
gi|30025493|gb|AY235807.1|

### *C. glabrata*

gi|23953802|gb|AY139784.1|  
gi|17646390|gb|AF441198.1|  
gi|9716435|gb|AF219008.1|  
gi|9716420|gb|AF218994.1|  
gi|9716391|gb|AF218966.1|  
gi|5566466|gb|AF167993.1|

### *C. tropicalis*

gi|52840011|gb|AY725426.1|  
gi|8118711|gb|AF268095.1|  
gi|12698685|gb|AF321539.1|  
gi|17646389|gb|AF441197.1|  
gi|9716428|gb|AF219001.1|  
gi|9716427|gb|AF219000.1|  
gi|9716418|gb|AF218992.1|

### *C. neoformans*

gi|58865019|emb|AJ876524.1|  
gi|21901919|emb|AJ493574.1|

gi|38015959|dbj|AB109268.1|  
gi|38015955|dbj|AB109264.1|  
gi|38015950|dbj|AB109259.1|  
gi|38015945|dbj|AB109254.1|  
gi|37999043|dbj|AB109231.1|  
gi|37999035|dbj|AB109223.1|

***A. fumigatus***

gi|57207973|dbj|AB197939.1|  
gi|34809331|gb|AY373851.1|  
gi|50657587|gb|AY676595.1|  
gi|21666969|gb|AF455534.1|  
gi|21666907|gb|AF455474.1|  
gi|21666897|gb|AF455465.1|  
gi|21666860|gb|AF455431.1|  
gi|6580802|gb|AF109330.1|  
gi|6580800|gb|AF109328.1|  
gi|6580799|gb|AF109327.1|  
gi|4092041|gb|AF078892.1|  
gi|4092039|gb|AF078890.1|  
gi|13560686|gb|AF348420.1|  
gi|4927229|gb|AF138288.1|

***A. flavus***

gi|62147581|emb|AJ874128.1|  
gi|56742025|emb|AJ871014.1|  
gi|50512833|gb|AY661444.1|  
gi|42556236|gb|AY521473.1|  
gi|17298179|dbj|AB074993.1|  
gi|17298177|dbj|AB074991.1|  
gi|3169795|gb|AF027863.1|  
gi|4927228|gb|AF138287.1|

***A. nidulans***

gi|21666939|gb|AF455505.1|  
gi|21666933|gb|AF455499.1|  
gi|21666853|gb|AF455424.1|

gi|21901916|emb|AJ493571.1|  
gi|21901912|emb|AJ493567.1|  
gi|21901909|emb|AJ493564.1|  
gi|21901906|emb|AJ493561.1|  
gi|21901902|emb|AJ493557.1|  
gi|21901904|emb|AJ493559.1|  
gi|21901897|emb|AJ493552.1|  
gi|21717423|dbj|AB087823.1|  
gi|21901895|emb|AJ493550.1|  
gi|21901899|emb|AJ493554.1|

***Fonsecaea pedrosoi***

gi|38195044|gb|AY366929.1|  
gi|38195025|gb|AY366910.1|  
gi|40809986|dbj|AB091206.2|  
gi|40809985|dbj|AB091205.2|  
gi|40809983|dbj|AB091203.2|  
gi|34850208|dbj|AB091207.1|  
gi|34393182|dbj|AB117984.1|  
gi|34393177|dbj|AB117979.1|  
gi|33411681|dbj|AB114132.1|  
gi|33411678|dbj|AB114129.1|

***P. verrucosa***

gi|34740132|dbj|AB087203.1|  
gi|944938|gb|U31848.1|  
gi|944937|gb|U31847.1|  
gi|944936|gb|U31846.1|

***C. carrionii***

gi|40882363|dbj|AB109179.1|  
gi|40882361|dbj|AB109177.1|  
gi|40882359|dbj|AB109175.1|  
gi|40882358|dbj|AB109174.1|  
gi|40882354|dbj|AB109170.1|  
gi|40882352|dbj|AB109168.1|

***S. schencki***

gi|54400060|emb|AJ850922.1|  
gi|54400059|emb|AJ850921.1|

gi|424139|gb|U03521.1|

***A. niger***

gi|66351077|emb|AJ876876.1|

gi|56069222|gb|AY656630.1|

gi|34809332|gb|AY373852.1|

gi|50659057|gb|AY677679.1|

gi|50540951|gb|AY669335.1|

gi|6580799|gb|AF109327.1|

gi|7208763|emb|AJ276060.1|

gi|4927227|gb|AF138904.1|

***M. racemosus***

gi|48374915|gb|AY625074.1|

gi|37935759|gb|AY243946.1|

gi|37935758|gb|AY243945.1|

gi|37935754|gb|AY243941.1|

gi|37935753|gb|AY243940.1|

gi|27527516|emb|AJ495421.1|

gi|6706299|emb|AJ271061.1|

***T. rubrum***

gi|30908942|gb|AY283675.1|

gi|639440|gb|U18352.1|

gi|7649347|emb|AJ270808.1|

gi|7649346|emb|AJ270807.1|

gi|14594725|gb|AY037783.1|

gi|6851246|gb|AF168123.1|

gi|5802314|gb|AF170472.1|

gi|5802313|gb|AF170471.1|

gi|33521186|gb|AY280496.1|

gi|33521185|gb|AY280495.1|

gi|33521184|gb|AY280494.1|

gi|40714504|dbj|AB122052.1|

gi|40714502|dbj|AB122050.1|

gi|40714500|dbj|AB122048.1|

gi|40714497|dbj|AB122045.1|

gi|40714495|dbj|AB122043.1|

gi|40714491|dbj|AB122039.1|

gi|13937118|gb|AF364061.1|

gi|8570131|gb|AF117945.1|

***T. mentagrophytes***

gi|58190208|emb|AJ876479.1|

gi|6851248|gb|AF168125.1|

gi|58190207|emb|AJ876478.1|

***E. floccosum***

gi|2956743|emb|AJ000629.1|

gi|6851253|gb|AF168130.1|

gi|5852198|gb|AF026309.1|

***M. canis***

gi|2956727|emb|AJ000619.1|

gi|2956727|emb|AJ000619.1|

gi|2956725|emb|AJ000617.1|

gi|6851250|gb|AF168127.1|

***M. gypseum***

gi|2956738|emb|AJ000621.1|

## Supplementary information 2

### The signal-noise ratio for the representative fungi<sup>a</sup>

NO.	Species	Signal-noise ratio
1	<i>Candida albicans</i>	51
2	<i>Candida tropicalis</i>	54
3	<i>Candida parapsilosis</i>	52
4	<i>Candida krusei</i>	62
5	<i>Candida glabrata</i>	60
6	<i>Cryptococcus neoformans</i>	53
7	<i>Aspergillus fumigatus</i>	56
8	<i>Aspergillus flavus</i>	57
9	<i>Aspergillus niger</i>	59
10	<i>Aspergillus nidulans</i>	17
11	<i>Fonsecaea pedrosoi</i>	46
12	<i>Phialophora verrucosa</i>	41
13	<i>Cladosporium carrionii</i>	55
14	<i>Sporothrix schenckii</i>	53
15	<i>Mucor racemosus</i>	58
16	<i>Trichophyton rubrum</i>	44
17	<i>Trichophyton rubrum</i>	61
18	<i>Epidermophy floccosum</i>	20
19	<i>Microsporium canis</i>	55
20	<i>Microsporium canis</i>	44

<sup>a</sup> Results from the mean value of three experiments.