

Supplementary Material

Table S1: Identification of yeast from duodenal Pia samples based on the D1/D2 domain sequence analysis.

| Taxa | No. of strain | strain | D1/D2 GenBank accession no. of closest species | Nucleotide substitutions to closest species | NO.of samples |
|---------------------------------|---------------|---|--|---|---------------|
| Ascomycota | | | | | |
| Pezizomycotina | | | | | |
| Herpotrichiellaceae | | | | | |
| <i>Exophiala dermatitidis</i> | 2 | PYD3-1, PYD93-25 | NG059225 | 0 | 2 |
| Sacotheciaceae | | | | | |
| <i>Aureobasidium elanogenum</i> | 3 | PYD95-7, PYD95-13, PYD95-14 | FJ150926 | 0,3 | 1 |
| Saccharomycotina | | | | | |
| Debaryomycetaceae | | | | | |
| <i>Candida metapsilosis</i> | 12 | PCD1-1, PCD3-8, PYD88-14, PYD88-15, PCD88-2, PCD92-3, PYD93-8, PCD93-17, PCD93-20, PYD95-3, PYD96-15, PYD96-21 | NG054815 | 0-1 | 7 |
| <i>Candida orthopsilosis</i> | 81 | PYD1-6, PYD3-2, PYD3-8, PCD3-1, PCD3-2, PCD3-7, PYD6-3, PYD88-3, PYD88-13, PCD88-3, PCD88-6, PCD89-2, PCD90-3, PCD90-21, PCD90-26, PYD91-3, PYD91-6, PYD91-7, PYD93-1, PYD93-2, PYD93-4, PYD93-9, PYD93-12, PYD93-15, PYD93-18, PYD93-20, PYD93-21, PYD93-23, PYD93-24, PYD93-27, PCD93-1, PCD93-2, PCD93-3, PCD93-4, PCD93-6, PCD93-7, PCD93-8, PCD93-9, PCD93-10, PCD93-12, PCD93-13, PCD93-14, PYD95-2, PYD95-5, PYD95-9, PYD95-10, PYD95-12, PYD95-15, PYD95-16, PYD95-17, PYD95-19, PCD95-1, PCD95-3, PCD95-5, PCD95-10, PCD95-12, YD96-1, PYD96-2, PYD96-5, PYD96-7, PYD96-9, | FJ746056 | 0-1 | 12 |

| Taxa | No. of strain | strain | D1/D2 GenBank accession no. of closest species | Nucleotide substitutions to closest species | NO.of samples |
|-----------------------------|---------------|---|--|---|---------------|
| <i>Candida parapsilosis</i> | 77 | PYD96-12, PYD96-13, PYD96-17, PYD96-18, PYD96-19, PYD96-22, PCD96-2, PCD96-3, PYD98-3, PYD98-4, PYD98-6, PYD98-10, PYD98-12, PCD98-3, PYD100-1, PYD100-4, PYD100-7, PCD100-1, PCD100-2, PCD100-4 PYD1-4, PYD1-8, PCD1-2, PCD1-4, PYD2-3, PCD2-1, PCD2-2, PCD2-3, PYD3-4, PYD3-7, PCD3-3, PYD5-8, PCD5-2, PCD5-4, PYD6-1, PYD6-2, PCD6-1, PCD6-2, PCD6-3, PYD88-2, PYD88-4, PYD88-5, PYD88-6, PYD88-9, PYD88-12, PCD88-1, PCD88-4, PCD88-5, PYD89-3, PYD89-5, PYD89-7, PCD89-1, PYD90-10, PYD90-14, PYD91-4, PYD91-8, PYD91-9, PCD91-2, PCD91-5, PYD92-1, PYD92-2, PYD92-3, PYD92-7, PYD92-9, PYD92-10, PCD92-1, PCD92-2, PCD92-4, PCD92-8, PCD92-9, PCD92-10, PCD95-11, PYD96-20, PYD96-24, PYD96-25, PCD96-1, PCD96-7, PCD96-8, PCD96-16, PYD98-2, PYD98-8, PYD98-9, PCD98-4, PCD98-6, PCD98-7, PCD98-9, PCD98-10, PYD99-1, PYD99-5, PYD99-10, PYD99-11, PCD99-3, PYD100-3, PYD100-5, PYD100-6, PYD100-9, PYD100-10 | U45754 | 0-2 | 15 |
| <i>Candida tropicalis</i> | 32 | PYD5-1, PYD5-2, PYD5-3, PYD5-4, PYD5-5, PYD5-7, PYD5-9, PCD5-1, PCD5-3, PYD90-15, PYD90-19, PCD90-2, PCD90-4, PCD90-6, PCD90-8, PCD90-10, PCD90-11, PCD90-19, PCD92-5, PYD94-3, PCD94-1, PCD94-5, PCD95-7, PCD95-8, PYD97-13, PCD97-1, PCD97-2, | NG054834 | 0-1 | 7 |

| Taxa | No. of strain | strain | D1/D2 GenBank accession no. of closest species | Nucleotide substitutions to closest species | NO.of samples |
|--|---------------|--|--|---|---------------|
| | | PCD97-3, PCD97-4, PCD97-7, PCD97-10, PYD98-11 | | | |
| <i>Lodderomyces elongisporus</i> | 2 | PYD1-5, PCD91-1 | U45763 | 0 | 2 |
| <i>Meyerozyma caribbica</i> | 2 | PYD89-4, PCD97-8 | AY187283 | 0-1 | 2 |
| <i>Schwanniomyces etchellsii</i> | 4 | PYD2-1, PYD2-4, PYD96-4, PYD100-2 | U45809 | 0 | 3 |
| Metschnikowiaceae | | | | | |
| <i>Candida vulturna</i> | 1 | PCD91-4 | JX515965 | 2 | 1 |
| Phaffomycetaceae | | | | | |
| <i>Cyberlindnera aff. jadinii</i> | 1 | PYD99-2 | EF550309 | 6 | 1 |
| <i>Cyberlindnera jadinii</i> | 6 | PYD94-1, PYD94-4, PYD94-6, PCD94-2, PCD94-6, PYD96-11 | EF550309 | 5 | 2 |
| Pichiaceae | | | | | |
| <i>Candida ethanolica</i> | 1 | PYD90-25 | U71073 | 0 | 1 |
| <i>Pichia kudriavzevii</i> | 10 | PYD3-3, PYD90-6, PYD90-11, PYD90-24, PCD90-1, PCD90-7, PYD94-2, PYD94-5, PCD94-3, PCD94-4 | EF550222 | 0-1 | 3 |
| <i>Pichia manshurica</i> | 5 | PYD2-5, PYD90-8, PYD90-17, PYD90-21, PYD92-5 | U75738 | 0-1 | 3 |
| Saccharomycetaceae | | | | | |
| <i>Candida glabrata</i> | 9 | PYD89-2, PYD89-8, PCD90-20, PYD97-1, PYD97-7, PYD97-9, PYD97-11, PCD97-9, PCD97-11 | U44808 | 1-2 | 3 |
| Saccharomycetales incertae sedis | | | | | |
| <i>Diutina rugosa</i> | 10 | PCD3-4, PCD3-5, PCD3-6, PYD92-11, PYD92-12, PCD93-19, PYD95-18, PCD96-11, PCD96-13, PYD100-8 | KT336717 | 0-2 | 6 |
| Trichomonascaceae | | | | | |
| <i>Wickerhamiella aff. infanticola</i> | 2 | PYD90-26, PYD90-28 | DQ438230 | 6 | 1 |

| Taxa | No. of strain | strain | D1/D2 GenBank accession no. of closest species | Nucleotide substitutions to closest species | NO.of samples |
|----------------------------------|---------------|--|--|---|---------------|
| <i>Wickerhamiella pararugosa</i> | 8 | PYD89-1, PCD90-17, PCD90-24, PYD92-8, PYD96-6, PYD97-4, PYD97-5, PYD97-6 | U62306 | 0, 1, 2, 5 | 5 |
| Basidiomycota | | | | | |
| Agaricomycotina | | | | | |
| Trichosporonaceae | | | | | |
| <i>Trichosporon asahii</i> | 1 | PYD90-27 | AF105393 | 0 | 1 |
| <i>Trichosporon japonicum</i> | 6 | PYD3-5, PYD88-1, PYD88-7, PYD88-8, PYD88-10, PYD95-8 | AF308657 | 0 | 3 |
| Pucciniomycotina | | | | | |
| Sporidiobolaceae | | | | | |
| <i>Rhodotorula mucilaginosa</i> | 4 | PYD3-6, PYD93-22, PYD98-5, PCD98-5 | AF070432 | 0-1 | 3 |

Table S2: Identification of yeast from jejunal Pia samples based on the D1/D2 domain sequence analysis.

| Taxa | No. of strain | strain | D1/D2 GenBank accession no. of closest species | Nucleotide substitutions to closest species | NO.of samples |
|---------------------------------|---------------|---|--|---|---------------|
| Ascomycota | | | | | |
| Pezizomycotina | | | | | |
| Herpotrichiellaceae | | | | | |
| <i>Exophiala dermatitidis</i> | 2 | PYJ97-10, PYJ97-11 | NG059225 | 0 | 1 |
| Sacchotheciaceae | | | | | |
| <i>Aureobasidium elanogenum</i> | 2 | PYJ95-5, PCJ95-4 | FJ150926 | 1 | 1 |
| Saccharomycotina | | | | | |
| Debaryomycetaceae | | | | | |
| <i>Candida albicans</i> | 9 | PYJ94-5, PCJ94-1, PCJ94-2, PCJ94-9, PYJ100-1, PYJ100-4, PYJ100-5, PYJ100-6, PYJ100-7 | U45776 | 0-1 | 2 |
| <i>Candida metapsilosis</i> | 2 | PCJ91-1, PYJ99-1 | NG054815 | 0-1 | 2 |
| <i>Candida orthopsilosis</i> | 29 | PCJ6-4, PYJ88-1, PYJ88-2, PYJ88-5, PYJ88-7, PCJ88-6, PCJ89-2, PCJ89-5, PCJ89-8, PCJ89-9, PYJ91-2, PYJ91-6, PYJ91-7, PCJ91-4, PCJ92-2, PYJ93-2, PYJ93-8, PYJ93-10, PYJ93-11, PYJ93-14, PYJ93-17, PCJ93-2, PCJ93-6, PCJ95-8, PCJ96-4, PYJ98-3, PYJ98-5, PYJ98-13, PCJ98-3, | FJ746056 | 0-1 | 9 |
| <i>Candida parapsilosis</i> | 40 | PYJ1-2, PCJ1-2, PCJ1-5, PCJ1-6, PCJ2-1, PCJ2-2, PCJ2-3, PYJ3-1, PYJ6-1, PYJ6-2, PCJ6-1, PCJ6-2, PCJ6-3, PCJ6-5, PYJ88-4, PYJ88-6, PYJ88-8, PCJ88-1, PCJ88-2, PCJ88-3, PCJ88-5, PCJ89-3, PCJ89-4, PYJ91-1, PYJ91-5, PCJ91-5, PCJ92-4, PCJ93-1, PYJ95-3, PCJ95-1, PCJ95-3, PYJ96-4, | U45754 | 0-1 | 14 |

| Taxa | No. of strain | strain | D1/D2 GenBank accession no. of closest species | Nucleotide substitutions to closest species | NO.of samples |
|-----------------------------------|---------------|---|--|---|---------------|
| <i>Candida tropicalis</i> | 44 | PYJ96-5, PCJ96-1, PCJ96-2, PYJ98-9, PCJ98-5, PYJ99-2, PCJ100-1, PCJ100-3 PYJ5-1, PYJ5-2, PYJ5-3, PYJ5-5, PCJ5-1, PCJ5-2, PCJ5-3, PYJ90-5, PYJ90-14, PYJ90-16, PYJ90-18, PYJ90-24, PCJ90-4, PCJ90-5, PCJ90-6, PCJ90-12, PCJ90-13, PCJ90-17, PCJ90-18, PCJ90-22, PYJ92-1, PCJ92-1, PCJ92-3, PCJ93-3, PYJ94-3, PYJ94-10, PYJ95-1, PYJ95-6, PCJ95-2, PCJ95-6, PCJ95-7, PCJ97-1, PCJ97-4, PCJ97-6, PYJ98-2, PYJ98-10, PYJ98-12, PYJ98-19, PCJ98-4, PYJ100-2, PYJ100-3, PCJ100-2, PCJ100-5, PCJ100-8 | NG054834 | 0-2 | 9 |
| <i>Schwanniomyces etchellsii</i> | 3 | PYJ2-1, PYJ2-2, PYJ2-3 | U45809 | 0 | 1 |
| <i>Yamadazyma olivae</i> | 1 | PYJ88-3 | FJ71543 | 0 | 1 |
| Metschnikowiaceae | | | | | |
| <i>Candida vulturna</i> | 1 | PCJ91-2 | JX515965 | 2 | 1 |
| Phaffomycetaceae | | | | | |
| <i>Cyberlindnera aff. jadinii</i> | 2 | PCJ90-11, PCJ90-16 | EF550309 | 6 | 1 |
| <i>Cyberlindnera jadinii</i> | 8 | PYJ92-4, PYJ93-5, PCJ93-4, PCJ93-5, PYJ94-7, PYJ94-8, PCJ94-7, PYJ96-9 | EF550309 | 3-5 | 4 |
| Pichiaceae | | | | | |
| <i>Pichia kudriavzevii</i> | 6 | PYJ90-10, PYJ90-17, PCJ90-7, PCJ90-19, PYJ94-2, PYJ94-9 | EF550222 | 0-1 | 2 |
| <i>Pichia manshurica</i> | 9 | PYJ89-4, PYJ89-8, PYJ90-4, PYJ90-20, PYJ90-25, PCJ90-1, PYJ92-2, PYJ98-22, PYJ99-3 | U75738 | 0, 2 | 5 |
| Saccharomycetaceae | | | | | |
| <i>Candida glabrata</i> | 12 | PYJ89-2, PYJ89-3, PYJ89-6, PYJ89-9, PYJ90-7, PYJ97-2, PYJ97-5, PYJ97-7, PYJ97-8, PYJ97-9, PYJ97-12, PCJ97-3 | U44808 | 0-2 | 3 |
| Saccharomycetales incertae sedis | | | | | |

| Taxa | No. of strain | strain | D1/D2 GenBank accession no. of closest species | Nucleotide substitutions to closest species | NO.of samples |
|----------------------------------|---------------|--|--|---|---------------|
| <i>Diutina rugosa</i> | 7 | PYJ93-7, PYJ93-16, PYJ94-1, PCJ94-4, PCJ94-6, PCJ94-10, PYJ95-4 | KT336717 | 0 | 3 |
| Trichomonascaceae | | | | | |
| <i>Wickerhamiella pararugosa</i> | 21 | PYJ89-1, PYJ90-3, PYJ90-26, PCJ90-2, PCJ90-9, PYJ93-6, PYJ93-18, PYJ93-19, PCJ93-7, PCJ93-8, PYJ96-7, PYJ96-10, PYJ97-1, PYJ97-4, PYJ97-6, PCJ97-2, PCJ97-7, PYJ98-17, PYJ98-21, PYJ99-6, PYJ99-10 | U62306 | 0-2 | 7 |
| Basidiomycota | | | | | |
| Agaricomycotina | | | | | |
| Trichosporonaceae | | | | | |
| <i>Trichosporon japonicum</i> | 1 | PCJ3-1 | AF308657 | 0 | 1 |
| Pucciniomycotina | | | | | |
| Sporidiobolaceae | | | | | |
| <i>Rhodotorula mucilaginosa</i> | 1 | PYJ96-6 | AF070432 | 0-1 | 1 |

Table S3: Identification of yeast from ileal Pia samples based on the D1/D2 domain sequence analysis.

| Taxa | No. of strain | strain | D1/D2 GenBank accession no. of closest species | Nucleotide substitutions to closest species | NO.of samples |
|---------------------------------|---------------|--|--|---|---------------|
| Ascomycota | | | | | |
| Pezizomycotina | | | | | |
| Herpotrichiellaceae | | | | | |
| <i>Exophiala dermatitidis</i> | 3 | PYI95-20, PYI97-6, PYI97-7 | NG059225 | 0 | 2 |
| Sacotheciaceae | | | | | |
| <i>Aureobasidium elanogenum</i> | 3 | PYI95-11, PYI95-16, PCI95-6 | FJ150926 | 1 | 1 |
| Saccharomycotina | | | | | |
| Debaryomycetaceae | | | | | |
| <i>Candida albicans</i> | 10 | PYI94-1, PYI94-5, PYI94-10, PCI94-2, PCI94-5, PYI100-4, PYI100-8, PCI100-1, PCI100-2, PCI100-5 | U45776 | 0-1 | 2 |
| <i>Candida metapsilosis</i> | 6 | PYI88-1, PYI88-2, PYI93-2, PYI93-11, PYI95-1, PYI100-6 | NG054815 | 0-1 | 4 |
| <i>Candida orthopsilosis</i> | 45 | PCI6-2, PYI89-3, PYI89-5, PYI89-6, PCI89-5, PCI89-7, PCI89-12, PCI89-13, PYI90-4, PYI91-2, PYI91-4, PYI93-1, PYI93-6, PYI93-10, PYI93-13, PCI93-1, PCI93-4, PCI93-8, PCI93-10, PYI95-2, PYI95-3, PYI95-7, PYI95-8, PYI95-10, PYI95-12, PYI95-13, PYI95-18, PCI95-1, PCI95-2, PCI95-7, PCI95-8, PCI95-9, PCI95-11, PCI95-13, PCI95-15, PCI95-18, PYI96-3, PYI96-4, PYI96-22, PCI96-1, PCI98-6, PYI99-5, PYI100-5, PYI100-10, PCI100-3 | FJ746056 | 0-1 | 10 |
| <i>Candida parapsilosis</i> | 29 | PYI1-1, PCI1-1, PCI1-7, PCI2-3, PCI2-5, PYI6-2, PCI88-3, PCI88-8, PCI89-6, PCI89-8, PCI89-9, | U45754 | 0-1 | 11 |

| Taxa | No. of strain | strain | D1/D2 GenBank accession no. of closest species | Nucleotide substitutions to closest species | NO.of samples |
|-----------------------------------|---------------|---|--|---|---------------|
| <i>Candida tropicalis</i> | 44 | PYI91-7, PCI91-5, PCI91-17, PYI93-7, PYI93-8, PYI93-16, PCI93-2, PCI93-5, PCI93-9, PYI95-15, PCI95-10, PCI95-14, PYI96-13, PCI96-15, PCI98-2, PYI100-1, PCI100-4, PCI100-9 PYI3-6, PCI3-3, PYI5-1, PYI5-2, PYI5-3, PYI5-4, PYI5-7, PYI5-8, PCI5-1, PCI5-2, PCI5-3, PYI88-3, PYI88-4, PCI88-1, PCI88-2, PCI88-5, PCI88-7, PYI90-7, PYI90-9, PYI90-16, PCI90-1, PCI90-5, PCI90-7, PCI90-9, PCI90-11, PYI91-5, PYI91-6, PCI91-1, PCI91-6, PCI91-7, PCI91-10, PCI91-14, PYI92-1, PYI92-2, PYI92-6, PYI94-7, PYI94-8, PCI94-3, PCI94-6, PYI95-17, PYI98-6, PCI98-3, PYI99-8, PCI100-6 | NG054834 | 0-1 | 11 |
| <i>Lodderomyces elongisporus</i> | | | U45763 | 0 | 0 |
| <i>Meyerozyma caribbica</i> | 17 | PYI96-1, PYI96-2, PYI96-7, PYI96-10, PYI96-14, PYI96-15, PYI96-20, PCI96-2, PCI96-3, PCI96-4, PCI96-5, PCI96-7, PCI96-8, PCI96-12, PCI96-13, PCI96-14, PCI96-17 | AY187283 | 0-1 | 1 |
| <i>Schwanniomyces etchellsii</i> | 2 | PYI2-2, PYI96-12 | U45809 | 0 | 2 |
| <i>Yamadazyma olivae</i> | | | FJ71543 | 0 | 0 |
| Metschnikowiaceae | | | | | |
| <i>Candida vulturna</i> | 1 | PYI100-3 | JX515965 | 2 | 1 |
| <i>Kodamaea ohmeri</i> | 1 | PCI90-8 | U45702 | 0 | 1 |
| Phaffomycetaceae | | | | | |
| <i>Cyberlindnera aff. jadinii</i> | 1 | PYI91-12 | EF550309 | 6 | 1 |
| <i>Cyberlindnera jadinii</i> | 6 | PYI92-3, PYI92-4, PCI93-7, PCI94-1, PCI94-4, PYI97-9 | EF550309 | 5 | 4 |
| Pichiaceae | | | | | |

| Taxa | No. of strain | strain | D1/D2 GenBank accession no. of closest species | Nucleotide substitutions to closest species | NO.of samples |
|----------------------------------|---------------|--|--|---|---------------|
| <i>Pichia kudriavzevii</i> | 19 | PYI3-1, PYI3-2, PYI3-3, PYI3-4, PYI3-5, PCI3-1, PCI3-2, PCI3-4, PYI90-3, PCI90-2, PCI90-10, PYI91-10, PYI91-15, PCI91-4, PYI94-2, PYI94-3, PYI94-4, PYI94-6, PYI94-9 | EF550222 | 0-2 | 4 |
| <i>Pichia manshurica</i> | 6 | PYI90-5, PYI90-15, PYI91-11, PYI92-7, PYI93-15, PYI99-11 | U75738 | 0-1 | 5 |
| Saccharomycetaceae | | | | | |
| <i>Candida glabrata</i> | 6 | PYI89-2, PYI89-4, PYI90-14, PYI97-1, PYI97-3, PYI97-5 | U44808 | 1-2 | 3 |
| Saccharomycetales incertae sedis | | | | | |
| <i>Diutina rugosa</i> | 3 | PYI93-12, PCI95-17, PYI96-19 | KT336717 | 0 | 3 |
| Trichomonascaceae | | | | | |
| <i>Wickerhamiella pararugosa</i> | 17 | PYI90-2, PYI90-12, PCI91-18, PYI92-8, PYI93-3, PYI93-9, PCI96-18, PYI97-2, PYI97-4, PYI97-8, PYI97-10, PCI97-1, PCI97-2, PCI97-3, PYI98-8, PYI99-6, PYI99-9 | U62306 | 1-2 | 8 |
| Basidiomycota | | | | | |
| Agaricomycotina | | | | | |
| Trichosporonaceae | | | | | |
| <i>Trichosporon asahii</i> | 1 | PYI90-11 | AF105393 | 0 | 1 |
| <i>Trichosporon japonicum</i> | 1 | PYI93-5 | AF308657 | 0 | 1 |
| Pucciniomycotina | | | | | |
| Sporidiobolaceae | | | | | |
| <i>Rhodotorula mucilaginosa</i> | 1 | PYI95-9 | AF070432 | 0 | 1 |

Table S4: Identification of yeast from duodenal epithelium samples based on the D1/D2 domain sequence analysis.

| Taxa | No. of strain | strain | D1/D2 GenBank accession no. of closest species | Nucleotide substitutions to closest species | NO.of samples |
|-------------------------------|---------------|---|--|---|---------------|
| Ascomycota | | | | | |
| Pezizomycotina | | | | | |
| Herpotrichiellaceae | | | | | |
| <i>Exophiala dermatitidis</i> | 1 | YTD97-8 | NG059225 | 0 | 1 |
| Saccharomycotina | | | | | |
| Debaryomycetaceae | | | | | |
| <i>Candida metapsilosis</i> | 1 | YTD3-2 | NG054815 | 0 | 1 |
| <i>Candida orthopsilosis</i> | 37 | CTD3-3, CTD3-4, YTD88-2, YTD88-4, CTD88-8, YTD89-3, YTD89-4, YTD89-7, YTD89-8, CTD89-1, CTD89-2, YTD92-3, YTD92-7, YTD92-8, YTD92-9, CTD92-3, YTD93-4, YTD93-7, YTD95-1, CTD95-1, YTD96-3, YTD96-4, YTD96-7, YTD96-8, CTD96-1, CTD96-4, YTD97-3, YTD97-7, YTD97-12, CTD97-3, CTD97-7, YTD99-1, YTD99-3, YTD99-5, YTD99-7, YTD100-2, CTD100-4 | FJ746056 | 0, 1, 4 | 10 |
| <i>Candida parapsilosis</i> | 73 | YTD2-2, YTD2-3, YTD2-4, CTD2-1, CTD2-2, YTD3-1, YTD3-5, CTD3-5, YTD4-1, YTD4-2, CTD4-1, CTD4-2, YTD5-1, YTD5-2, YTD5-3, YTD6-1, CTD6-1, CTD6-2, YTD88-3, YTD88-6, CTD88-1, CTD88-3, CTD88-6, CTD88-7, CTD88-9, CTD88-10, YTD89-5, YTD89-6, YTD90-2, YTD90-3, YTD90-5, YTD90-9, CTD90-4, CTD90-5, YTD91-1, YTD91-3, YTD91-4, YTD91-6, YTD91-7, YTD91-8, CTD91-1, CTD91-3, CTD91-5, CTD91-6, YTD92-1, YTD92-2, YTD92-5, | U45754 | 0 | 15 |

| Taxa | No. of strain | strain | D1/D2 GenBank accession no. of closest species | Nucleotide substitutions to closest species | NO.of samples |
|--|---------------|---|--|---|---------------|
| | | CTD92-4, CTD92-6, CTD93-4, CTD93-5, YTD97-1, YTD97-6, YTD97-11, CTD97-1, CTD97-4, CTD97-6, YTD98-1, YTD98-2, YTD98-3, YTD98-7, YTD98-9, YTD98-10, CTD98-1, CTD98-3, CTD98-4, CTD98-5, CTD98-6, YTD99-4, CTD99-1, CTD99-2, CTD99-3, CTD100-3 | | | |
| <i>Candida tropicalis</i> | 2 | CTD92-2, CTD97-8 | NG054834 | 0 | 2 |
| <i>Candida zeylanoides</i> | 4 | YTD100-3, YTD100-5, YTD100-9, CTD100-1 | NG060834 | 0 | 1 |
| <i>Debaryomyces hansenii</i> | 1 | CTD100-2 | NG042634 | 0 | 1 |
| <i>Meyerozyma caribbica</i> | 2 | YTD93-5, YTD93-6 | EU348786 | 0 | 1 |
| <i>Schwanniomyces etchellsii</i> | 3 | YTD2-1, YTD96-6, YTD97-10 | U45809 | 0 | 3 |
| Metschnikowiaceae | | | | | |
| <i>Candida duobushaemulonii</i> | 1 | CTD88-11 | AJ508564 | 0 | 1 |
| <i>Candida vulturna</i> | 1 | YTD92-4 | JX515965 | 2 | 1 |
| Pichiaceae | | | | | |
| <i>Pichia manshurica</i> | 2 | YTD93-1, YTD93-9 | U75738 | 0 | 1 |
| Saccharomycetaceae | | | | | |
| <i>Kluyveromyces marxianus</i> | 1 | CTD92-5 | U94924 | 0 | 1 |
| Saccharomycetales incertae sedis | | | | | |
| <i>Diutina rugosa</i> | 5 | YTD92-10, CTD92-1, CTD93-1, CTD93-2, CTD93-6 | KT336717 | 0-2 | 2 |
| Trichomonascaceae | | | | | |
| <i>Wickerhamiella aff. infanticola</i> | 2 | CTD88-2, CTD100-5 | DQ438230 | 7 | 2 |
| <i>Wickerhamiella pararugosa</i> | 5 | CTD3-2, YTD6-2, YTD97-9, CTD99-4, CTD99-6 | U62306 | 0-2 | 4 |
| <i>Yarrowia lipolytica</i> | 3 | CTD96-3, YTD97-4, YTD97-5 | AM268450 | 0 | 2 |

Basidiomycota

| Taxa | No. of strain | strain | D1/D2 GenBank accession no. of closest species | Nucleotide substitutions to closest species | NO.of samples |
|---------------------------------|---------------|---|--|---|---------------|
| Agaricomycotina | | | | | |
| Trichosporonaceae | | | | | |
| <i>Trichosporon asahii</i> | 1 | YTD96-1 | AF105393 | 0 | 1 |
| <i>Trichosporon japonicum</i> | 3 | YTD90-7, CTD90-1, CTD90-3 | AF308657 | 0 | 1 |
| Pucciniomycotina | | | | | |
| Sporidiobolaceae | | | | | |
| <i>Rhodotorula mucilaginosa</i> | 14 | YTD3-4, YTD6-3, YTD88-1, CTD88-5, YTD90-4, YTD90-8, YTD91-9, YTD91-10, YTD96-5, YTD97-2, CTD97-5, YTD98-6, YTD100-7, YTD100-8 | AF070432 | 0-1 | 9 |

Table S5: Identification of yeast from jejunal epithelium samples based on the D1/D2 domain sequence analysis.

| Taxa | No. of strain | strain | D1/D2 GenBank accession no. of closest species | Nucleotide substitutions to closest species | NO.of samples |
|-------------------------------|---------------|--|--|---|---------------|
| Ascomycota | | | | | |
| Pezizomycotina | | | | | |
| Herpotrichiellaceae | | | | | |
| <i>Exophiala dermatitidis</i> | 1 | YTJ96-11 | NG059225 | 0 | 1 |
| Saccharomycotina | | | | | |
| Debaryomycetaceae | | | | | |
| <i>Candida metapsilosis</i> | 1 | CTJ93-3 | NG054815 | 0 | 1 |
| <i>Candida orthopsilosis</i> | 31 | CTJ3-2, YTJ89-3, YTJ89-5, YTJ89-6, CTJ89-2, CTJ89-4, CTJ89-6, YTJ90-8, YTJ92-4, YTJ92-6, CTJ92-5, YTJ93-2, YTJ93-3, YTJ93-4, CTJ93-7, YTJ96-4, YTJ96-10, CTJ96-1, YTJ97-3, YTJ97-5, CTJ97-2, CTJ98-1, CTJ98-2, CTJ98-3, CTJ98-5, CTJ98-9, YTJ100-3, YTJ100-5, YTJ100-7, CTJ100-4, CTJ100-7 | FJ746056 | 0-2 | 9 |
| <i>Candida parapsilosis</i> | 52 | YTJ2-1, YTJ2-2, YTJ2-3, CTJ2-1, CTJ2-2, YTJ3-1, CTJ3-1, YTJ4-2, YTJ4-3, YTJ4-4, CTJ4-1, CTJ4-2, YTJ6-1, YTJ6-2, YTJ6-4, CTJ6-1, CTJ6-2, YTJ89-1, YTJ89-7, CTJ89-1, CTJ89-5, YTJ90-3, YTJ90-5, CTJ90-1, YTJ91-1, YTJ91-4, YTJ91-7, YTJ91-8, YTJ92-1, YTJ92-2, YTJ92-8, CTJ92-1, CTJ92-2, CTJ92-3, YTJ93-5, YTJ93-6, YTJ93-7, YTJ93-10, CTJ93-1, YTJ96-2, YTJ96-9, CTJ97-4, CTJ97-5, CTJ97-6, YTJ98-2, YTJ98-3, YTJ98-4, CTJ98-7, YTJ99-1, CTJ99-8, YTJ100-4, YTJ100-8 | U45754 | 0-1 | 14 |
| <i>Candida tropicalis</i> | 3 | CTJ90-3, CTJ92-6, CTJ97-3 | NG054834 | 0 | 3 |

| Taxa | No. of strain | strain | D1/D2 GenBank accession no. of closest species | Nucleotide substitutions to closest species | NO.of samples |
|-----------------------------------|---------------|---|--|---|---------------|
| <i>Candida zeylanoides</i> | 2 | YTJ99-3, YTJ99-8 | NG060834 | 0 | 1 |
| <i>Debaryomyces hansenii</i> | 2 | CTJ99-3, CTJ100-3 | NG042634 | 0 | 2 |
| <i>Schwanniomyces etchellsii</i> | 2 | CTJ96-2, CTJ97-1 | U45809 | 0 | 2 |
| <i>Yamadazyma olivae</i> | 1 | YTJ4-1 | FJ715430 | 0 | 1 |
| Metschnikowiaceae | | | | | |
| <i>Candida duobushaemulonii</i> | 1 | CTJ92-4 | AJ508564 | 0 | 1 |
| <i>Candida vulturna</i> | 4 | YTJ89-4, CTJ98-8, YTJ99-5, YTJ99-7 | JX515965 | 2 | 3 |
| <i>Kodamaea ohmeri</i> | 2 | YTJ98-1, CTJ99-1 | U45702 | 0 | 2 |
| Pichiaceae | | | | | |
| <i>Pichia kudriavzevii</i> | 1 | CTJ90-2 | EF550222 | 1 | 1 |
| <i>Pichia manshurica</i> | 2 | YTJ90-7, YTJ92-7 | U75738 | 0 | 2 |
| Saccharomycetaceae | | | | | |
| <i>Kluyveromyces marxianus</i> | 1 | YTJ92-5 | U94924 | 0 | 1 |
| Saccharomycetales incertae sedis | | | | | |
| <i>Diutina rugosa</i> | 6 | CTJ93-5, CTJ93-6, CTJ96-3, YTJ97-4, CTJ100-5, CTJ100-6 | KT336717 | 0-1 | 4 |
| Trichomonascaceae | | | | | |
| <i>Wickerhamiella infanticola</i> | 1 | YTJ96-5 | NG058278 | 6 | 1 |
| <i>Wickerhamiella pararugosa</i> | 7 | YTJ90-4, YTJ90-6, YTJ97-7, YTJ97-9, YTJ99-2, YTJ99-4, CTJ99-7 | U62306 | 0-2 | 3 |
| Basidiomycota | | | | | |
| Agaricomycotina | | | | | |
| Trichosporonaceae | | | | | |
| <i>Trichosporon japonicum</i> | 2 | YTJ6-3, CTJ100-2 | AF308657 | 0 | 2 |
| Pucciniomycotina | | | | | |

| Taxa | No. of strain | strain | D1/D2 GenBank accession no. of closest species | Nucleotide substitutions to closest species | NO.of samples |
|---------------------------------|---------------|---|--|---|---------------|
| Sporidiobolaceae | | | | | |
| <i>Rhodotorula mucilaginosa</i> | 17 | YTJ89-9, YTJ90-1, YTJ90-2, YTJ91-3, YTJ91-5, YTJ91-6, CTJ91-1, CTJ91-2, CTJ91-3, CTJ91-4, YTJ93-8, CTJ93-4, YTJ96-6, CTJ96-5, YTJ97-6, YTJ99-9, CTJ99-5 | AF070432 | 0-1 | 7 |

Table S6: Identification of yeast from ileal epithelium samples based on the D1/D2 domain sequence analysis.

| Taxa | No. of strain | strain | D1/D2 GenBank accession no. of closest species | Nucleotide substitutions to closest species | NO.of samples |
|----------------------------------|---------------|---|--|---|---------------|
| Ascomycota | | | | | |
| Saccharomycotina | | | | | |
| Debaryomycetaceae | | | | | |
| <i>Candida albicans</i> | 1 | YTI100-6 | U45776 | 1 | 1 |
| <i>Candida orthopsilosis</i> | 30 | YTI1-1, YTI3-3, YTI88-2, CTI88-4, YTI90-1, YTI93-1, YTI93-2, CTI93-1, CTI93-6, YTI96-1, YTI96-3, YTI96-5, YTI96-6, YTI97-1, YTI97-3, CTI97-1, CTI97-2, CTI97-3, CTI97-4, YTI98-3, YTI98-4, YTI98-6, CTI98-4, CTI98-5, CTI98-7, YTI99-1, CTI99-5, YTI100-3, YTI100-10, CTI100-3 | FJ746056 | 0, 1, 3, 5 | 10 |
| <i>Candida parapsilosis</i> | 57 | YTI1-2, YTI1-3, YTI1-4, CTI1-1, CTI1-2, YTI2-1, YTI2-2, YTI2-3, YTI2-4, CTI2-1, CTI2-2, YTI3-1, YTI3-2, CTI3-1, CTI3-2, YTI4-1, YTI4-2, YTI4-3, CTI4-1, CTI4-2, YTI5-1, YTI88-1, YTI88-5, YTI88-6, CTI88-2, CTI88-3, CTI88-5, CTI88-6, YTI89-1, YTI90-3, YTI90-4, YTI90-5, CTI90-1, CTI90-2, CTI90-3, CTI90-4, CTI90-5, CTI92-1, CTI92-2, YTI93-5, YTI93-6, CTI93-4, CTI93-5, CTI96-3, YTI97-4, YTI97-5, CTI98-2, YTI99-2, YTI99-4, YTI99-5, YTI99-6, CTI99-1, CTI99-2, CTI99-6, YTI100-7, CTI100-1, CTI100-5 | U45754 | 0-1 | 15 |
| <i>Candida tropicalis</i> | 1 | YTI92-1 | NG054834 | 0 | 1 |
| <i>Candida zeylanoides</i> | 1 | YTI88-4 | NG060834 | 2 | 1 |
| <i>Meyerozyma caribbica</i> | 2 | YTI98-8, YTI98-9 | EU348786 | 0 | 1 |
| <i>Schwanniomyces etchellsii</i> | 1 | CTI98-3 | U45809 | 0 | 1 |

| Taxa | No. of strain | strain | D1/D2 GenBank accession no. of closest species | Nucleotide substitutions to closest species | NO.of samples |
|----------------------------------|---------------|---|--|---|---------------|
| Metschnikowiaceae | | | | | |
| <i>Candida duobushaemulonii</i> | 3 | YTI100-8, CTI100-2, CTI100-4 | AJ508564 | 0 | 1 |
| <i>Clavispora lusitaniae</i> | 1 | YTI100-4 | AY190538 | 0 | 1 |
| Pichiaceae | | | | | |
| <i>Pichia manshurica</i> | 5 | YTI92-2, YTI92-3, YTI92-5, YTI92-6, CTI92-5 | U75738 | 0 | 1 |
| Saccharomycetaceae | | | | | |
| <i>Kluyveromyces marxianus</i> | 2 | CTI92-3, CTI92-4 | U94924 | 0 | 1 |
| Saccharomycetales incertae sedis | | | | | |
| <i>Diutina rugosa</i> | 2 | CTI96-4, YTI97-2 | KT336717 | 0 | 2 |
| Trichomonascaceae | | | | | |
| <i>Wickerhamiella pararugosa</i> | 1 | YTI98-1 | U62306 | 0 | 1 |
| Basidiomycota | | | | | |
| Agaricomycotina | | | | | |
| Trichosporonaceae | | | | | |
| <i>Trichosporon asahii</i> | 1 | YTI100-5 | AF105393 | 0 | 1 |
| Pucciniomycotina | | | | | |
| Agaricostilbaceae | | | | | |
| <i>Sterigmatomyces elviae</i> | 1 | YTI100-12 | AF177415 | 0 | 1 |
| Sporidiobolaceae | | | | | |
| <i>Rhodotorula mucilaginosa</i> | 15 | YTI3-4, YTI4-4, YTI5-2, YTI90-6, YTI90-7, YTI90-8, CTI90-6, YTI96-4, CTI96-5, CTI96-6, YTI97-8, CTI98-8, YTI99-7, YTI100-9, YTI100-11 | AF070432 | 0-1 | 9 |