Figure S2 Alignment of FluG amino acid sequences of four aspergilli. The sequences used are
A. flavus (ADY69103 and EED46528), *A. oryzae* (BAE63436), *A. nidulans* (AAC37414), and *A. fumigatus* (EAL92854 and EDP53020).

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A. flavus      ---MDLTSLQSLIQTHPLIDNHAHNLLKRDEACNYAKYPFEQITSEAQGSALGNATSTLP
A. oryzae      ---MDLTSLQSLIQTHPLIDNHAHNLLKRDEACNYAKYPFEQITSEAQGSALGNATSTLP
A. nidulans    --MATLSSLRHLIQTHPLIDNHAHNLLSQSAACKYAKYPFEQIISEAQGVALANAPSTLS
A. fumigatus   MDNDTLDSLRHLIQCHPLIDNHAHNILDKASACNYAKYPFEQITSEAQGVALQNATSTLP
                   * **. ***.**********.* .   ** ********* ***** ** ** ***


A. flavus      LHRAATQLAALYRCASSDWDHVKAARDAWVQRDYDGLIRECLQGTHTLLLDDLLTDQDIE
A. oryzae      LHRAATQLAALYRCASSDWDHVKAARDAWVQRDYDGLIRECLQGTHTLLLDDLLTDQDIE
A. nidulans    FHRAASQLATLYQSSSSDWDSVRAARDQSVQRDYEGLIRKCLEGTQVLLLDDLLTENDVE
A. fumigatus   LHRAASQLAVLYDCPSSDWEQVKAARQKWVERDYDGLVRQCLQGTHTLLLDDLLADQDIE
                ****.*** ** . ****. *.***   *.***.**.* **.**. *******...*.*


A. flavus      SYEWHDRFTTSQTKRIVRIEILAAETISTLMRDDARPQEG-DVSVLRERWEQFREGFKQR
A. oryzae      SYEWHDRFTTSQTKRIVRIEILAAETISTLMRDDARPQEG-DVSVLRERWEQFREGFKQR
A. nidulans    LFDWHDRFTASATKRIVRIEALAASVLSQIVHGGPVPQDSSDLSAFQTLWESFSRNFSAL
A. fumigatus   PYQWHDQFTVSATKRIVRIEALAARMLATVMRGSSILEAG-DVSALESRFLAFRDGFSRL
                . ***.** * ******** ***   .. ...  .   *.*       *   .*


A. flavus      IAEAIADPAVVGFKSVICYRTGLNVQPIEDSDDTLLLESFGRTVGQGQGSAYRVEDKRLN
A. oryzae      IAEAIADPAVVGFKSVICYRTGLNVQPIEDSDDTLLLESFGRTVGQGQGSAYRVEDKRLN
A. nidulans    VSDAIADPAVVGFKSVICYRTGLDVQPTDDRDTERLIRSFARTISQAAVSTPRVEDKPLN
A. fumigatus   VSEAIEDPAVVGFKSVICYRTGLNVQPT-DEDAGVLLQSFARTIRTS-EAGYRVEDKPLN
                ...** **************** ***   * *    *. ** **.     . ***** **


A. flavus      DWVVRQTLNLLQSAKAATASAPNKPLQLHTGLGDNDIDLVLANPAHLQSLIAQYPEVDFV
A. oryzae      DWVVRQTLNLLQSAKAATASAPNKPLQLHTGLGDNDIDLVLANPAHLQSLIAQYPEVDFV
A. nidulans    DWLVRQTLNLLKAAKVTQ---PNKPLQLHTGLGDNDINLLKSNPAHLQSLIAQYPEVDFV
A. fumigatus   DWLVRQTLDLLQASKSSSSKDCKNKPLQLHTGLGDNDISLVLANPAYLQPLIARYPQVDFV
                **.***** **...* .     ************** *. .*** ** ***.** ****


A. flavus      LLHSSYPYTREAGYLACVYPNVYLDLGEVFPMVSRDAQESILRDSLDIVPTTRLLWSTDG
A. oryzae      LLHSSYPYTREAGYLACVYPNVYLDLGEVFPMVSRDAQESILRDSLDIVPTTRLLWSTDG
A. nidulans    LLHSSYPYTREAGYLACVYPNVYLDLGEVFPMVSRDAQESILRESLEIVPSTRLLWSTDG
A. fumigatus   LLHSSYPYTREAGYLACVYPNVYLDLGEVFPMVSRDAEESIIRDSLDIVPTKRLLWSTDG
                *************************************.***.*.**.***. ********


A. flavus      HFFPETFYLANKQFRDVMEKVFVDYVHHGDFTVDQAKQAAADILFHNSNRAYSLNEKLAY
A. oryzae      HFFPETFYLANKQFRDVMEKVFVDYVHYGDFTVDQAKQAAADILFHNSNRAYSLNEKLAY
A. nidulans    HFFPETFWLANRQFRDALEKVFVDYVQNGDYTIEQAMQAAADILFHNSNRLYELNEQPPS
A. fumigatus   HFFPETFYLGNKQFR----DVFVDYVRQGDWTVTQAKEAAADILFHNANRLYDLNEQPSF
                ******* * *.***    ******.  ** *. ** .********* ** * ***.


A. flavus      EAPVSANS--VSASSTATLDAFMRGNPDVKYIWMQFIDYTNTTRVRMFPVAEFAKIARKQ
A. oryzae      EAPVSANS--VSASSTATLDAFMRGNPDVKYIWMQFIDYTNTTRVRMFPVAEFAKIARKQ
A. nidulans    AALSSGHQTVSRISSTDLLEKFIRSNPGVKYVWTQFIDYTATVRVRMFPVMEFAKIVRKQ
A. fumigatus   DQISKP----ITISSTHTLETFMRCNPDVKYVWMQVDYTATTRLRIFPILEFAKIVRKQ
                          ***   *. *.* ** ***.* * .*** * *.*.** . ***** ***


A. flavus      RRVGICLCTQLMLQDDSIAPEGSVTGQFYMEPDLSSLRRNVGIDSKSATVMTYWKTEEGA
A. oryzae      RRVGICLCTQLMLQDDSIAPEGSVTGQFYMEPDLSSLRRNVGIDSKSATVMTYWKTEEGA
A. nidulans    RRLGISMATFWMLQDDEVVG-GSTTGQFYLIPDLSTLSPNVGIDSKSATVMTWWKSEQGE
A. fumigatus   RRIGISLCVFWMLQDDSMTPEGTTTGQFYMEPDLTSLSPNVGLGSKSATVMTFWRSEENK
                **.**...  *****   .   *. **.****. ***.* ***. ******** *..*..
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A. flavus      PLPGCPRTTLQRVTNNLR-EHGIEVTCGFEIEVILLKPITN-DAGETDYVPVVRNHSWSQ
A. oryzae      PLPGCPRTTLQRVTNNLR-EHGIEVTCGFEIEVILLKPITN-DAGETDYVPVVRNHSWSQ
A. nidulans    SLEECPRTNLLNINNKLKDEFGIQATCGFEIEVVFLKPTTDPSTGEEDWAPSVTNHSWSQ
A. fumigatus   PLEGCPRTALQNIVDKLHTDHGIAVTCGFEIEVIFLRPDTDPSTGETRYLPAVTNHSWSQ
                *  **** *   .   *. . ** *******. *.* *   .**    * * ******

A. flavus      MTSDTRKMVPLLEEIVEALASIGIHLEQFHAESAPGQFEFILPPGSPIATVDTLIKARQV
A. oryzae      MTSDTRKMVPLLEEIVEALASIGIHLEQFHAESAPGQFEFILPPGSPIATVDTLIKARQV
A. nidulans    MTRETRRMLPLLEEIAETLASIGIHLQQFHAESAPGQFEFILPPDNPVAAVDTLIKSRQV
A. fumigatus   MTSDTRRMLPLLEEIADTLTAIGIPLEQFHSESAPGQFEFVLPRNSPLPAVDTLLKARQV
               ** .**.*.******  ..*..*** *.***.*********.**   *. .****.*.***

A. flavus      VTCVAEQHGLRATLHPRPLPHAAGSASHAHVSIAPPTQEDAFLAGVMRHYPALAAFTLSQ
A. oryzae      VTCVAEQHGLRATLHPRPLPHAAGSASHAHVSIAPPTQEDAFLAGVMRHYPALAAFTLSQ
A. nidulans    IANIVEKHGLRATLYPRPYPSAAGTASHAHVSISPSTKEESFLAGVLQHYPAVLAFTLSG
A. fumigatus   VANVAERHGLRATLHPRPLPNFAGTASHAHVSISPSTNEDSFLAGVLAHFPALLACTLAQ
                .. .   *.******* ***   *  **.*********.* * *..*****. *.**. * **.

A. flavus      DVSYDRVKSGLWAGSEWVTWGTQNRETPIRKISPGHWEIKTLDGLANMYFAIAAFLSAGY
A. oryzae      DVSYDRVKSGLWAGSEWVTWGTQNRETPIRKISPGHWEIKTLDGLANMYFAIAAFLSAGY
A. nidulans    DASYDRVKSGIWAGSEWVTWGTQNREAPIRKISPGHWEIKSLDGLANMYLAMAAFLAAGY
A. fumigatus   ETSYDRVKSGLWAGSEWVAWGTQNREAPVRKIEPGHWELKSLDGLANMYVAMAAFLGAGY
               . ******* .******* *******.*.*** ***** .* ********* *.**** ***

A. flavus      LGVKENLPLTVKDCIHDAAKLPQAEREALGITTELPKSLTQSLDALEADSALQSIIGETV
A. oryzae      LGVKENLPLTVKDCIHDAAKLPQAEREALGITTELPKSLTQSLDALEADSALQSIIGETV
A. nidulans    TGVKENLPLTIKDCPYDAASLPESERAALGITTKLPNTLAKSLAALESDEILRSLLGENL
A. fumigatus   LGLEHKIPLTVKDCLYDAATLTDAQREDLGITTRLPNTLAQSLDALESDHALQELLGPFL
                *.   .***.***  *** *   ..*  ***** **  .*..** ***.*    *. ..*   .

A. flavus      VNNYTSVKRIESKRLLAMDETTRRTWLLERY
A. oryzae      VNNYTSVKRIESKRLLAMDETTRRTWLLERY
A. nidulans    VEDYIIVKRAESKKLSAMDEKARRKWLVERY
A. fumigatus   VRSYVIVKRAESKKLAAMGDEERRKWLIERY
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