

Expanded View Figures

Phagocytic index (2h after *N. glabrata* injection)

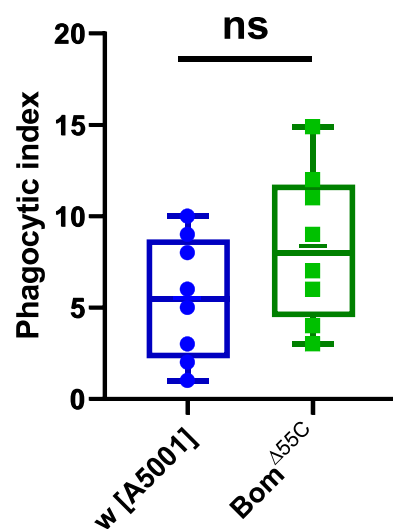
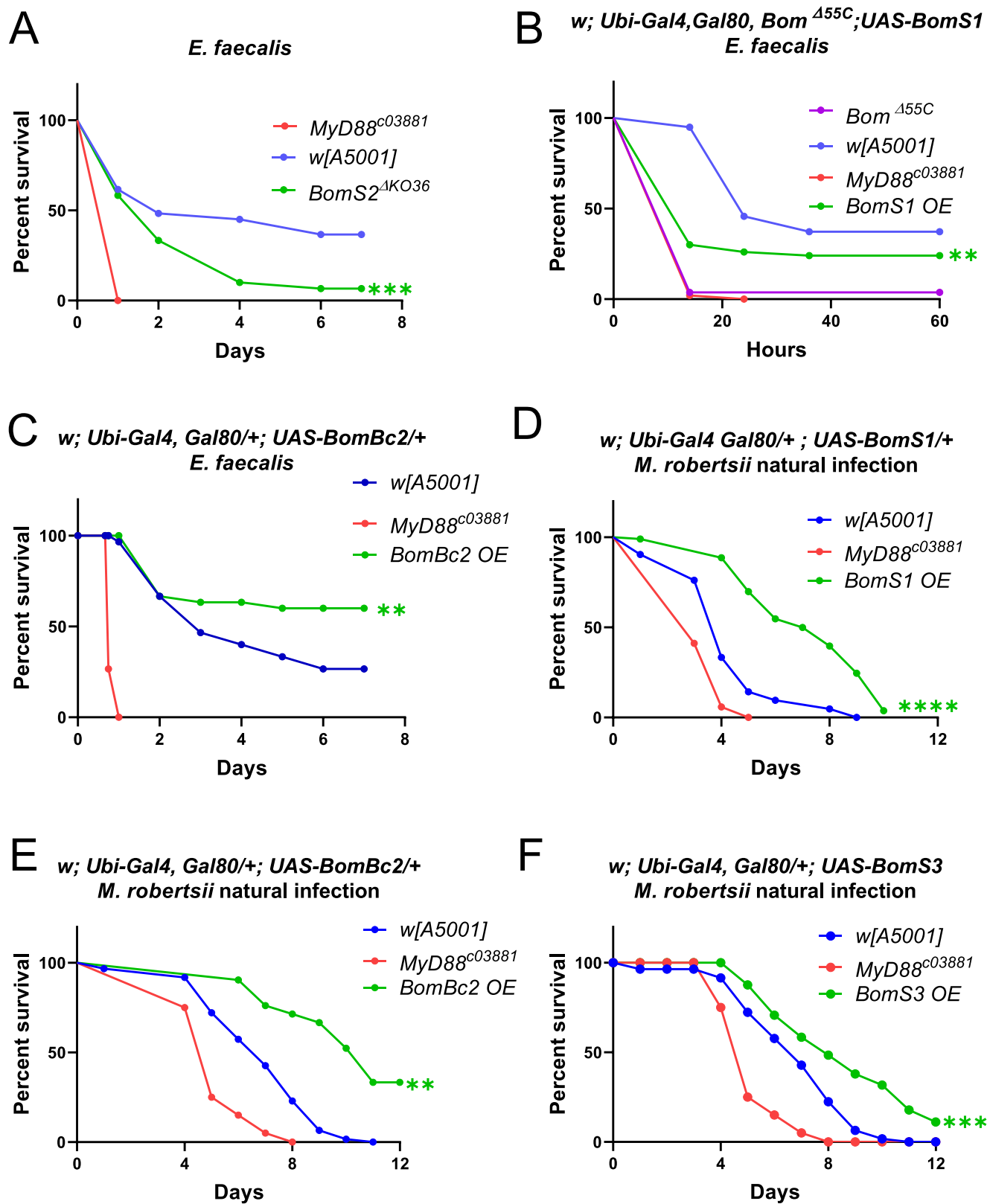


Figure EV1. Bomanins at 55C locus are not involved in phagocytosis.

6000 live yeasts *N. glabrata* cells were injected into *w [A5001]* wild-type flies and *Bom^{Δ55C}* flies and their phagocytic index was monitored 2 h after injection. Data information: Mann-Whitney test. ns: not significant. The middle bar of the boxplot represents the median and the upper and lower limits of the box indicate respectively the first and third quartiles; the whiskers define the minima and maxima; *Bom^{Δ55C}* flies: $P = 0.15$. Source data are available online for this figure.



◀ **Figure EV2. Overexpression of *BomS1*, *BomBc2*, or *BomS3* in wild-type or *Bom*^{ΔSSC} background enhances resistance to *E. faecalis* or *M. robertsii*.**

(A) Survival curves of *BomS2*^{ΔK036} null mutant flies after *E. faecalis* infection. (B) Survival curves of *BomS1*-overexpressing (OE) flies in a *Bom*^{ΔSSC} background after *E. faecalis* injection. (C) Survival experiments of *BomBc2*-overexpression (OE) flies in a wild-type background after *E. faecalis* injection. (D–F) Survival curves of *BomS1* (D), *BomBc2* (E), *BomS3* (F) overexpressing (OE) flies in a wild-type background after *M. robertsii* natural infection. Data information: In (A–F) three experiments were performed at different times and each experiment used biological triplicates of 20 flies in parallel. The pooled data were analyzed between infected-mutant and -w [A5001] fly, except for (B) that compared *BomS1* OE in a *Bom*^{ΔSSC} background to *Bom*^{ΔSSC}, using the Log-Rank test; ns, no significant difference. (A) *BomS2*^{ΔK036} flies: $P = 0.0002$; (B) *BomS1* OE: $P = 0.0013$; (C) *BomBc2* OE: $P = 0.0007$; (D) *BomS1* OE: $P < 0.0001$; (E) *BomBc2* OE: $P = 0.0025$; (F) *BomS3* OE: $P = 0.0009$. Source data are available online for this figure.

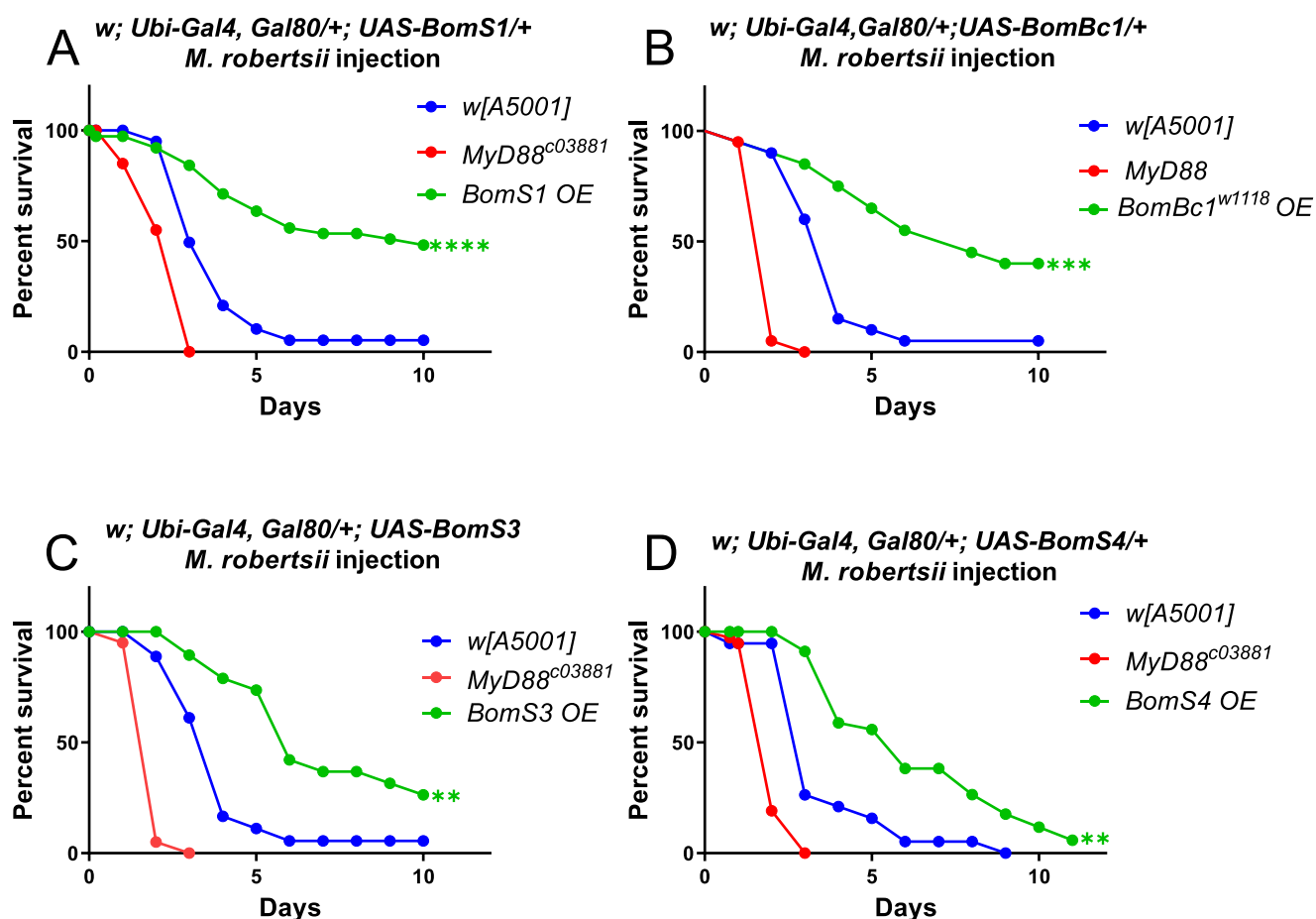


Figure EV3. Overexpression of *BomBc1*, *BomS1*, *BomS3*, and *BomS4* in a wild-type genetic background can protect them from injected *M. robertsii* spores.

(A–D) Survival curves of *BomBc1* (A), *BomS1* (B), *BomS3* (C), and *BomS4* (D)-overexpressing (OE) flies in a wild-type background after *M. robertsii* injection. Data information: three experiments were performed at different times and each experiment used biological triplicates of 20 flies in parallel. The pooled data were analyzed between infected-mutant and - *w* [A5001] fly using the Log-Rank test; ns, no significant difference. (A) *BomS1* OE: $P < 0.0001$; (B) *BomBc1w1118* OE: $P = 0.0003$; (C) *BomS3* OE: $P = 0.0029$; (D) *BomS4* OE: $P = 0.0072$. Source data are available online for this figure.

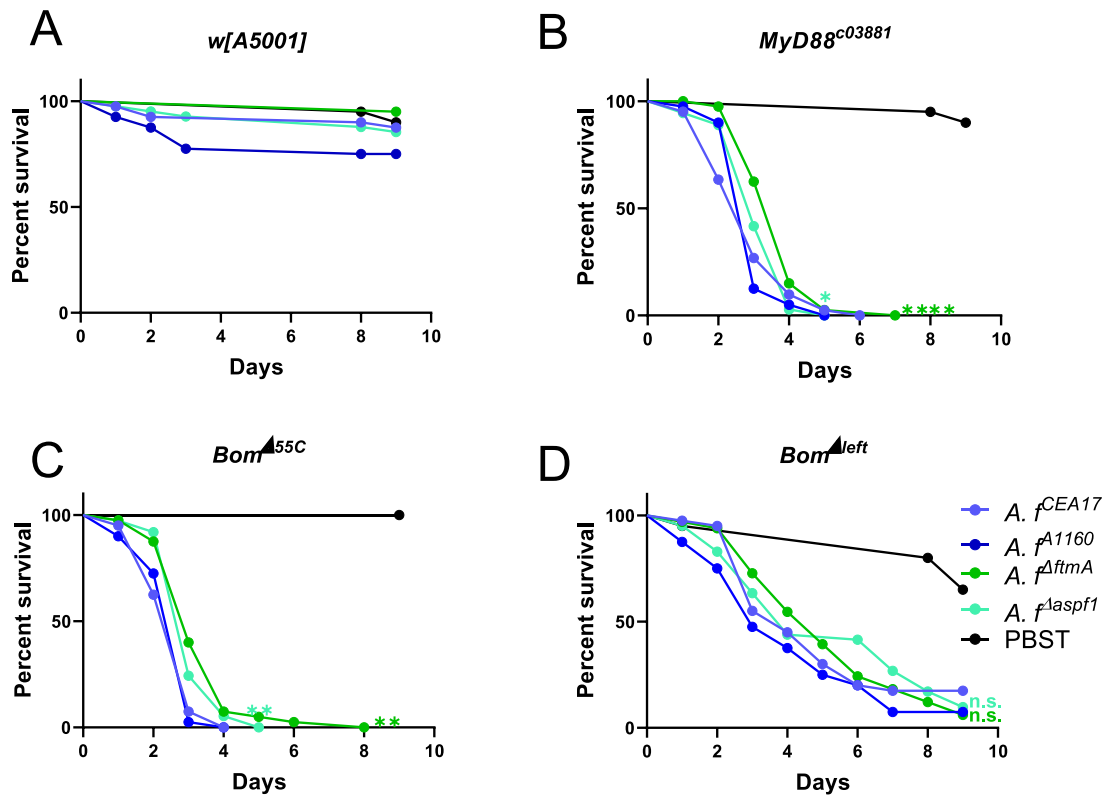


Figure EV4. Mycotoxins mutants of *A. fumigatus* are as virulent as wild-type fungi when injected into *BomA^{left}* flies.

(A–D) Survival curves of *w[A5001]* (A), *MyD88^{c03881}* (B), *BomA^{55C}* (C), and *BomA^{left}* (D) flies to *A. fumigatus*^{ΔftmA} (fumitremorgin/verruculogen pathway inactivated), *A. fumigatus*^{Δaspf1} (restrictocin mutant), and *A. fumigatus* genetic background controls (*A. fumigatus*^{CEA17} or *A. fumigatus*^{A1160}) injection. Data information: three experiments were performed at different times and each experiment used biological triplicates of 20 flies in parallel. The pooled data were analyzed between mycotoxin mutant infected flies and wild-type *A. fumigatus* control-infected flies using the Log-Rank test; ns, no significant difference. (A) *A. fumigatus*^{ΔftmA}: $P = 0.22$, *A. fumigatus*^{Δaspf1}: $P = 0.86$; (B) *A. fumigatus*^{ΔftmA}: $P < 0.0001$, *A. fumigatus*^{Δaspf1}: $P = 0.047$; (C) *A. fumigatus*^{ΔftmA}: $P = 0.0013$, *A. fumigatus*^{ΔftmA}: $P = 0.0011$; (D) *A. fumigatus*^{ΔftmA}: $P = 0.93$, *A. fumigatus*^{ΔftmA}: $P = 0.99$. Source data are available online for this figure.