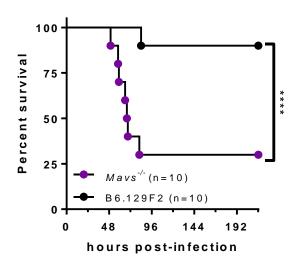
## SUPPLEMENTAL MATERIALS FOR:

## Mda5 is an essential vita-PAMP sensor necessary for host resistance against *Aspergillus fumigatus*

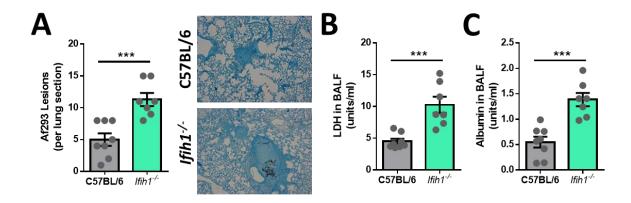
Xi Wang, Alayna K. Caffrey-Carr, Ko-wei Liu, Vanessa Espinosa, Walburga Croteau, Sourabh Dhingra, Amariliz Rivera, Robert A. Cramer, Joshua J. Obar

## Supplemental Table 1. Primers used to construct the CEA10 FLARE strain.

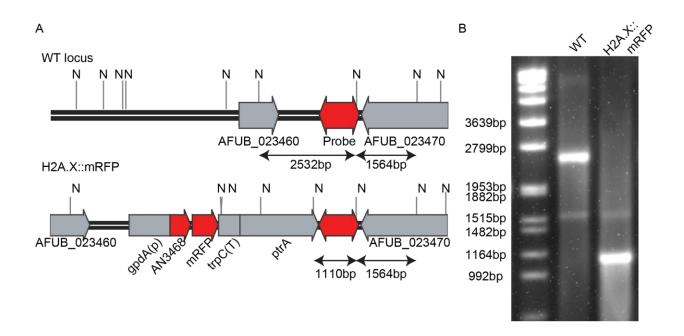
Primer	Sequence $(5' \rightarrow 3')$
name	
RAC2888	agagtatgcggcaagtcatgagcagttccaggtggaatgttatg
RAC2799	Gtgatgtctgctcaagcggggta
RAC4582	taccccgcttgagcagacatcacatgactggcggcaaatctggtgg
RAC4583	ggctccagcgcctgcaccagctccagctcctggctgccctttccg
RAC2600	Ggagctggtgcaggcgctggagcc
RAC4575	gcgttttattcttgttgacatgggttaggcgccggtggagtggcggc
RAC2536	Cccatgtcaacaagaataaaacgc
RAC2537	Ccgagtggagatgtggagt
RAC1981	gagcaattggaatccgccctccgccccgagctcccaaatctgtccagatc
RAC4134	agagcattgtttgaggcgaccggttacctgtgcattctgggtaaacgactc
RAC3873	gcagctaactctggcagcacc
RAC3874	ggcggaggggggattccaattgctccgtcacttctcatgctacggacac
RAC3875	cgcatcagtgcctcctctcagacgagtgaggcttggggttcgtc
RAC3876	gttctgcccctggatcgctagg
RAC2055	accggtcgcctcaaacaatgctct
RAC2056	gtctgagaggaggcactgatgcg
RAC3877	gacgccggttctctgggtaatc
RAC3878	cacgggataaccatgcaataggcg



Supplemental Figure 1. Mavs-dependent responses are essential for host resistance against the Af293 strain of Aspergillus fumigatus.  $Mavs^{-/-}$  and B6.129F2 mice were challenged i.t. with  $4x10^7$  resting conidia of the Af293 isolate of Aspergillus fumigatus. Survival analysis in immunecompetent wild-type and knock-out mice were tracked over the first 9 days. \*\*\*\*, P < 0.0001 by Mantel-Cox log rank test.



Supplemental Figure 2. Mda5-dependent responses are essential for host resistance against invasive aspergillosis in corticosteroid immunosuppressed mice. Mice were treated with 40 mg/kg of Kenalog given s.c. on one day prior to and 4 days after challenge i.t. with 10<sup>6</sup> resting conidia of the Af293 strain of *A. fumigatus*. At 72 h post-inoculation lungs were collected for histological analysis for fungal growth (A). BALF was also collected at 72 h post-inoculation to assess LDH activity as a proxy for lung damage (B) and albumin as a proxy for lung leakage (C). Mann-Whitney U-test was used for statistical analysis.



## Supplemental Figure 3. DNA analysis for confirmation of CEA10 H2A.X::mRFP strain. (A)

Schematic representation showing the intergenic distance between AFUB\_023460 and AFUB\_023470. H2A.X (AN3468) from *A. nidulans* was fused with *gpdA*(P), *trpC*(T) and *ptrA* gene conferring resistance to pyrithiamine as described in materials and methods. The DNA fragment used as probe and the expected DNA hybridization patterns for southern blot analysis are shown. (B) Southern blot analysis of CEA10 WT and H2AX:mRFP strain. NsiI digested DNA of each strain was hybridized with the probe as shown in A. N – *Nsi*I restriction site.