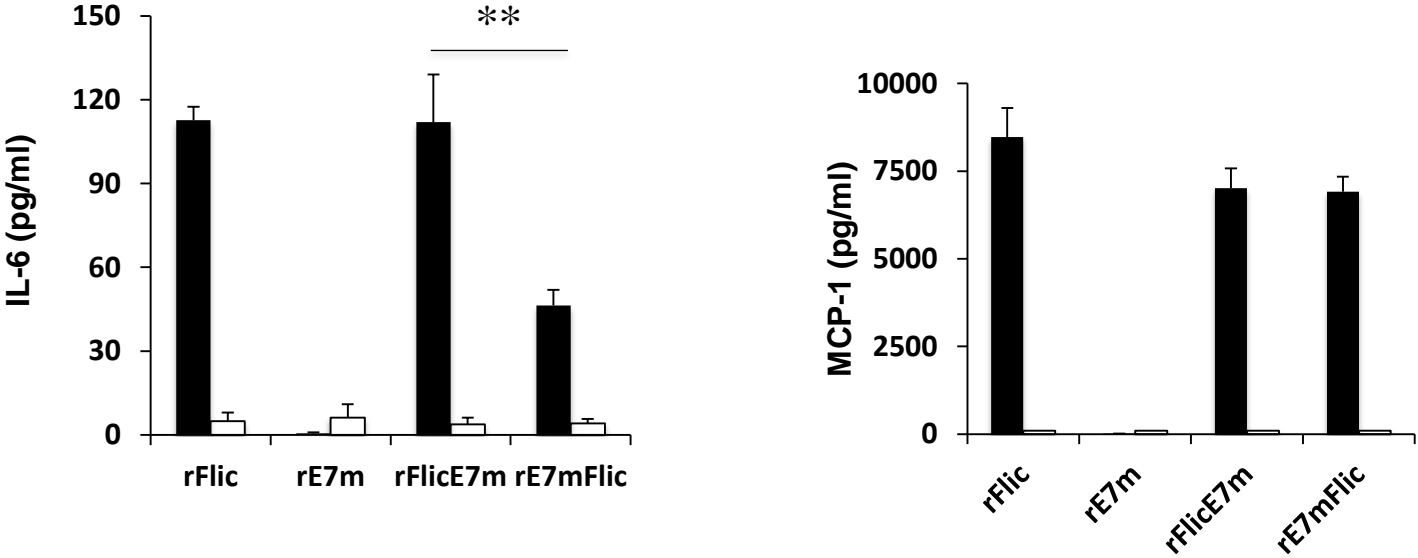


# **Carboxyl-terminal fusion of E7 into Flagellin shifts TLR5 activation to NLRC4/NAIP5 activation and induces TLR5-independent anti-tumor immunity**

**Authors:** Kuo-Hsing Lin<sup>1,a</sup>, Li-Sheng Chang<sup>1,4,a</sup>, Chun-Yuan Tian<sup>1</sup>, Yi-Chen Yeh<sup>1</sup>, Yu-Jie Chen<sup>1,4</sup>, Tsung-Hsien Chuang<sup>2</sup>, Shih-Jen Liu<sup>1,3,\*</sup>, Chih-Hsiang Leng<sup>1,3,\*</sup>

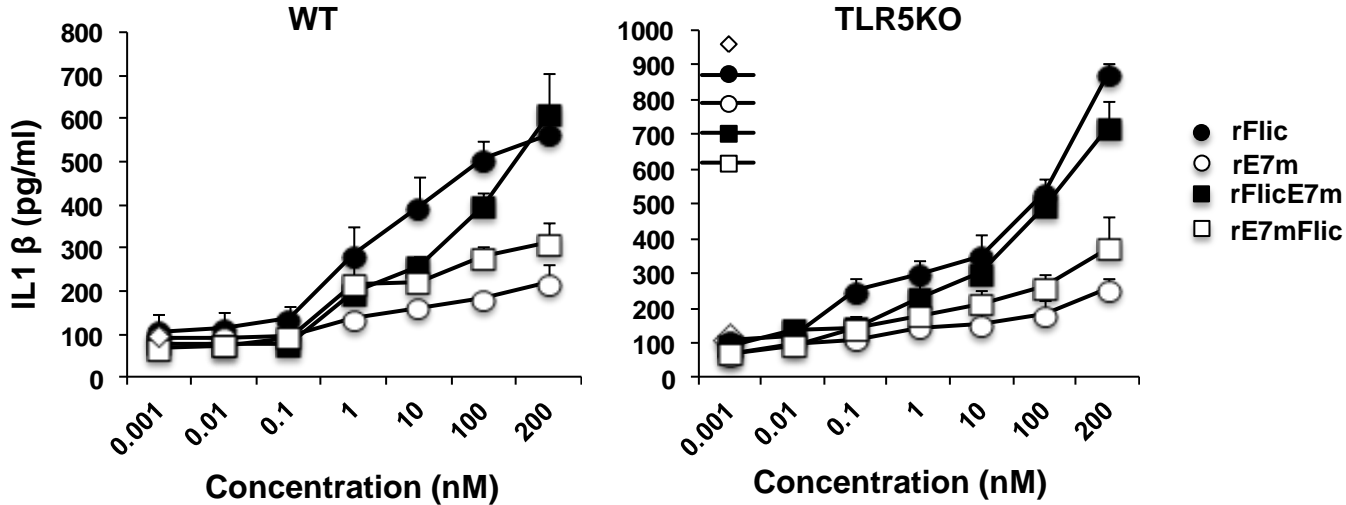
Supplemental Figure 1



**Figure S1. Activation of TLR5 signaling by recombinant proteins *in vivo*.** IL-6 and MCP-1 levels in the sera were measured by ELISA as described in the “Materials and Methods.” All of the data are expressed as the means  $\pm$  SEM of three independent tests. \* and \*\* indicate  $p < 0.05$  and  $0.01$ , respectively.

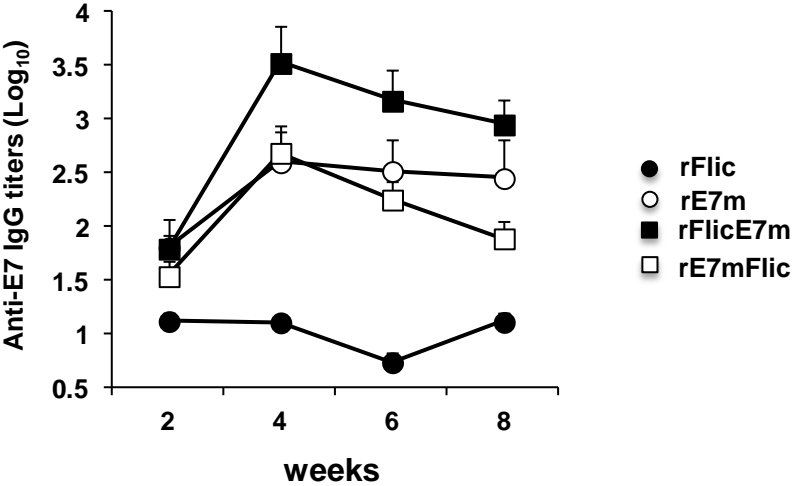
# Supplemental Figure 2

## BMDMs



**Figure S2. NLRC4 inflammasome activation by flagellin fusion proteins.** BMDMs from WT or TLR5KO mice were seeded at a density of  $1 \times 10^6$  cells/well in serum-free medium. The recombinant proteins (0.001-20 nM) or LPS (0.1  $\mu\text{g/ml}$ ) were added to each well and incubated for 24 hr. Supernatant was collected for the IL-1 $\beta$  ELISA. Data are expressed as the means + SEM of three independent experiments.

Supplemental Figure 3



**Figure S3. Immunization with rFlicE7m induced higher levels of anti-E7 antibody responses than rE7mFlic.** Mice were immunized with 1 nmol of rFlic, rE7m, rFlicE7m or rE7mFlic twice at two-week intervals. Sera were collected at weeks 0, 2, 4, 6, and 8, and the anti-E7 IgG antibody titer was analyzed by ELISA. Data are shown as the means + SD.