

OMTN, Volume 9

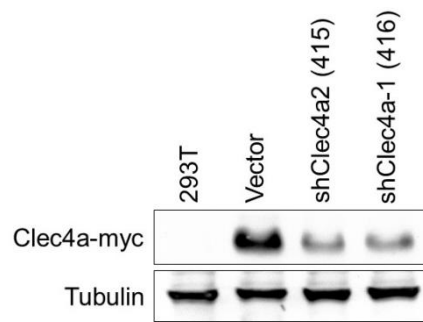
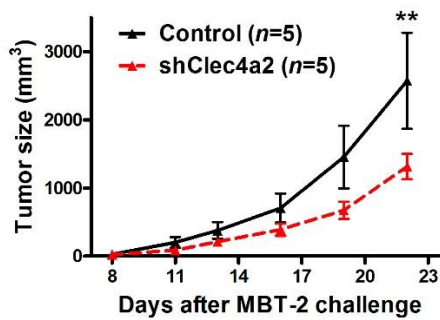
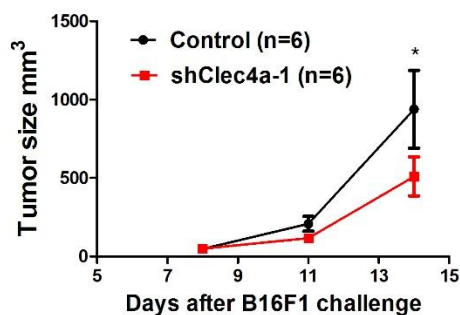
Supplemental Information

Skin Delivery of Clec4a Small Hairpin RNA

Elicited an Effective Antitumor Response

by Enhancing CD8⁺ Immunity *In Vivo*

Tzu-Yang Weng, Chia-Jung Li, Chung-Yen Li, Yu-Hsuan Hung, Meng-Chi Yen, Yu-Wei Chang, Yu-Hung Chen, Yi-Ling Chen, Hui-Ping Hsu, Jang-Yang Chang, and Ming-Derg Lai

A**B****C**

Supplemental Figure 1. The knockdown efficacy of shClec4a2 (415), which specifically target the mRNA sequence of Clec4a2 but not Clec4a1 or Clec4b1, was examined in 293T cells co-transfected with Clec4a2-myc. The protein expression of Clec4a2-myc was measured using immunoblotting. 293T, parental control. Vector, pLKO_AS1+ Clec4a2-myc. shClec4a, Clec4a2 shRNA+ Clec4a2-myc. A pLKO_AS1 plasmid served as the vector control. Tubulin was used as an internal control. **(B)** Mice bearing MBT-2 tumor cells were treated with shClec4a2 (415) via a gene gun. The tumor size was examined in the C3H/HeN mice on the indicated days (***P* < 0.005 on day 22, pLKO_AS1 versus shClec4a2). **(C)** Mice received B16F1 tumor cells were treated with shClec4a-1 via a gene gun. The tumor size was examined in the C57BL/6 mice on the indicated days. (**P* < 0.05 on day 14, pLKO_AS1 versus shClec4a-1).

Sequences producing significant alignments:

Select: All None Selected: 0

Alignments							
Download ▾ GenBank Graphics Distance tree of results							
Description	Max score	Total score	Query cover	E value	Ident	Accession	
Transcripts							
<input type="checkbox"/> PREDICTED: Mus musculus C-type lectin domain family 4, member a2 (Clec4a2), transcript variant X2, mRNA	42.1	42.1	100%	0.003	100%	XM_011241364.2	
<input type="checkbox"/> PREDICTED: Mus musculus C-type lectin domain family 4, member a2 (Clec4a2), transcript variant X1, mRNA	42.1	42.1	100%	0.003	100%	XM_006506155.1	
<input type="checkbox"/> Mus musculus C-type lectin domain family 4, member a2 (Clec4a2), transcript variant 1, mRNA	42.1	42.1	100%	0.003	100%	NM_001170333.1	
<input type="checkbox"/> Mus musculus C-type lectin domain family 4, member a2 (Clec4a2), transcript variant 3, mRNA	42.1	42.1	100%	0.003	100%	NM_001170332.1	
<input type="checkbox"/> Mus musculus C-type lectin domain family 4, member a2 (Clec4a2), transcript variant 2, mRNA	42.1	42.1	100%	0.003	100%	NM_011999.4	
<input type="checkbox"/> PREDICTED: Mus musculus C-type lectin domain family 4, member b1 (Clec4b1), transcript variant X1, mRNA	34.2	34.2	100%	0.64	95%	XM_006506570.1	
<input type="checkbox"/> Mus musculus C-type lectin domain family 4, member b1 (Clec4b1), transcript variant 2, mRNA	34.2	34.2	100%	0.64	95%	NM_027218.3	
<input type="checkbox"/> Mus musculus C-type lectin domain family 4, member b1 (Clec4b1), transcript variant 1, mRNA	34.2	34.2	100%	0.64	95%	NM_001190310.1	
<input type="checkbox"/> PREDICTED: Mus musculus 180kD domain family, member 3 (180kD3), transcript variant X5, mRNA	28.2	28.2	66%	40	100%	XM_006528503.3	

Supplemental Figure 2. The BLAST result of shClec4a-2. The target sequence of shClec4a-2 was searched by using Standard Nucleotide BLAST on NCBI. The mouse genomic and transcript databases were used. The black frame represented the prediction of the shClec4a-2 target sequence to identify 100% of the sequence of the Clec4a2 mRNA. The red frame represented the prediction of the shClec4a-2 target sequence to identify 100% of the sequence of the Clec4b1 mRNA.