

Supplementary Materials: *EGFR* Mutation-Harboring Lung Cancer Cells Produce *CLEC11A* with Endothelial Trophic and Tumor-Promoting Activities

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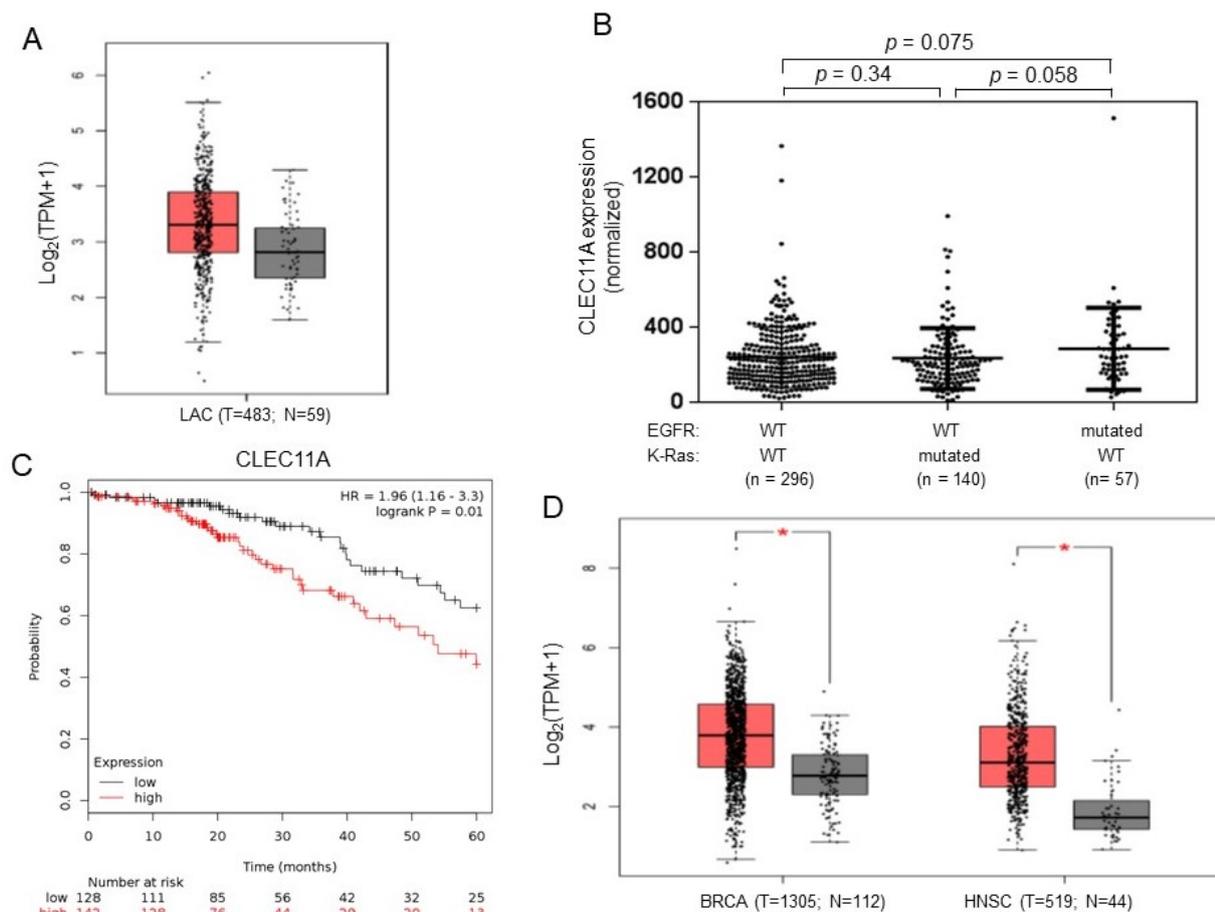


Figure S1. *CLEC11A* expression is higher in LAC tissues with *EGFR* mutation. (A) Data of LAC and normal lung in TCGA database (Red: tumor/T; Grey: normal/N) were analyzed for *CLEC11A* mRNA levels (TPM, transcript per million) through the Boxplot program in Gene Expression Profiling Interactive Analysis (GEPIA). (B) *CLEC11A* expression levels of LAC patients were retrieved through OncoPrint and were sub-grouped according to the presence or absence of *EGFR* and *K-Ras* mutation in the Genomic Data Commons (GDC) data portal, NCI. (C) The correlation between *CLEC11A* levels (RNAseq) and survival of LAC patients was examined through the Kaplan Meier plotter with auto selected best cutoff. (D) Data of breast cancer (BRCA) and head and neck cancer (HNSC) in TCGA database were analyzed for *CLEC11A* levels through the Boxplot program in GEPIA.

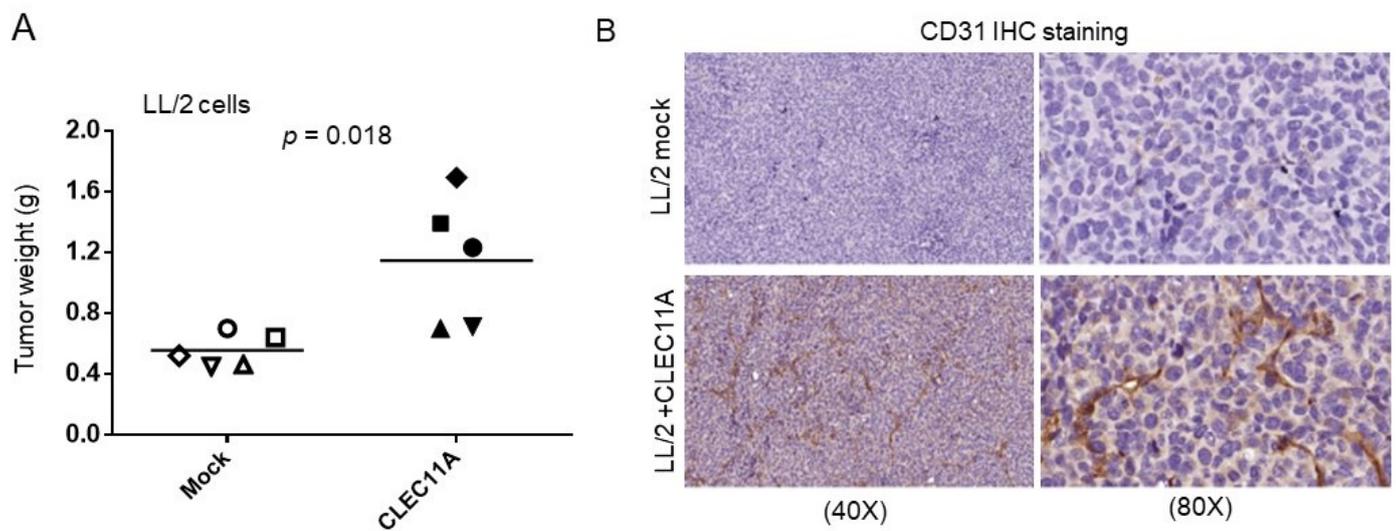


Figure S2. Addition of CLEC11A promotes tumor formation and recruitment of endothelial cells by LL/2 cells. **(A)** One million LL/2 lung cancer cells were mixed in Matrigel either with or without hCLEC11A (1 mg/mL) and were injected subcutaneously into both flanks of individual nude mice. Tumors were harvested 2 wks post-transplantation and weighted. Symbols of the same shapes represented tumors derived from the same mice. **(B)** Tissue sections prepared from tumors formed by LL/2 in the presence or absence of CLEC11A were subjected to IHC staining using an anti-CD31 antibody.

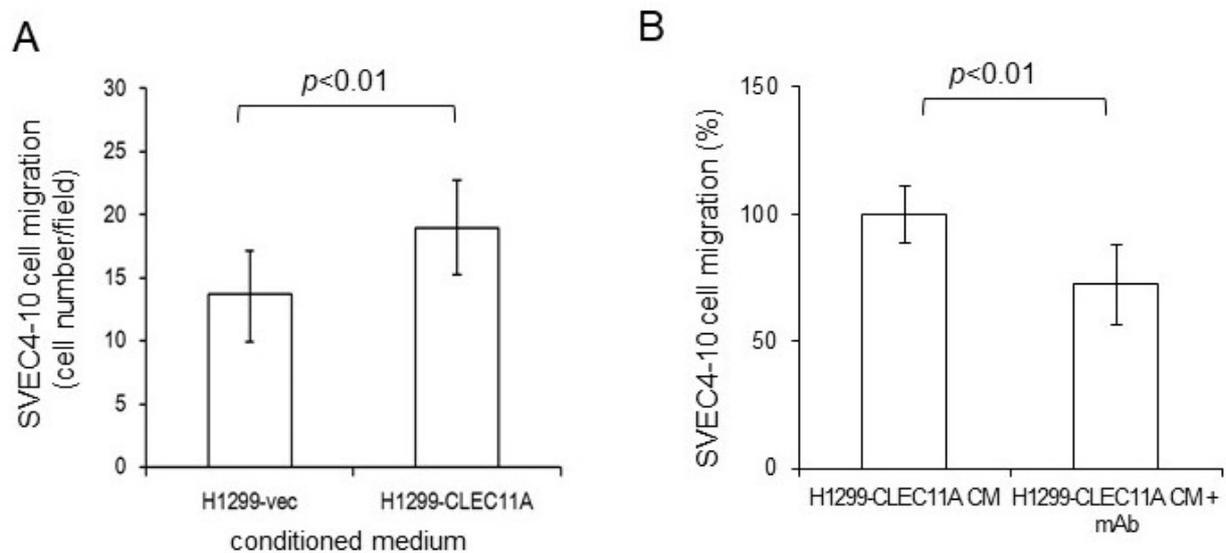


Figure S3. The conditioned medium produced by H1299-CLEC11A cells have chemo-attractant ability against SEVC4-10 endothelial cells. **(A)** Chemo-attractant activities of conditioned media collected from H1299-Vec or H1299-CLEC11A cells were tested against SVEC4-10 cells in the Transwell chambers as described in Materials and Methods. The data presented are the mean and standard deviations of a representative experiments. **(B)** Chemo-attractant activity of H1299-CLEC11A conditioned medium was tested in the presence or absence of an anti-CLEC11A monoclonal antibody (mAb; 1 μ g/mL) against SVEC4-10 cells in the Transwell chambers. The data presented are the mean and standard deviations of a representative experiments.

Uncropped immunoblots

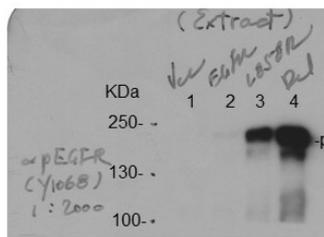


Fig. 1A pEGFR (Y1068)

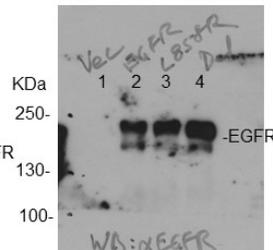


Fig. 1A EGFR

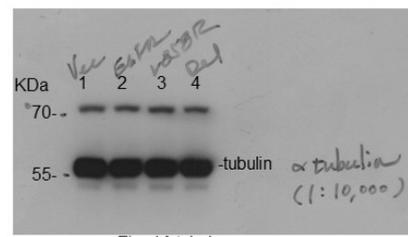


Fig. 1A tubulin

Figure 1

Fig. 1.
1: H1299-Vec
2: H1299-EGFR
3: H1299-L858R
4: H1299-Del

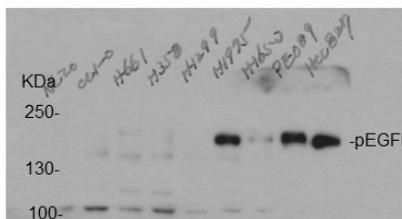


Fig. 1B pEGFR

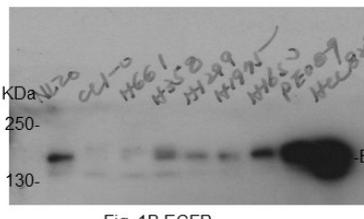


Fig. 1B EGFR

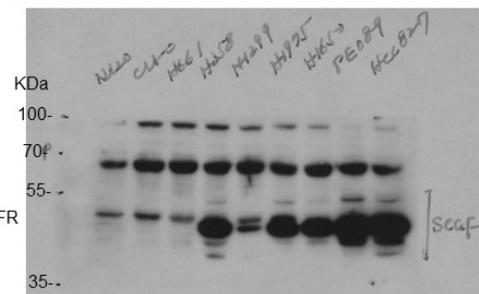


Fig. 1B CLEC11A

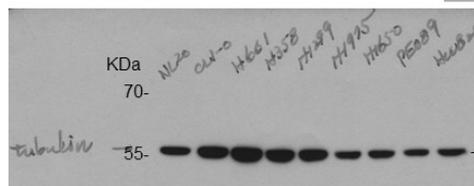


Fig. 1B tubulin

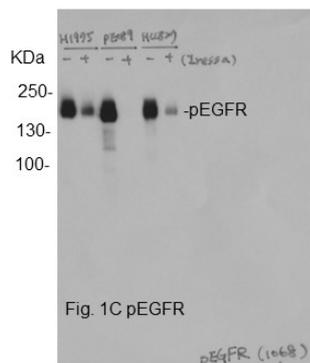


Fig. 1C pEGFR

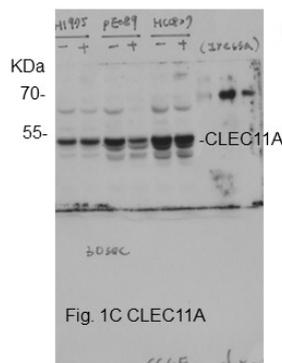


Fig. 1C CLEC11A

Figure 1C

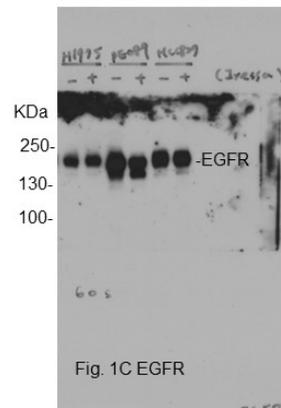


Fig. 1C EGFR

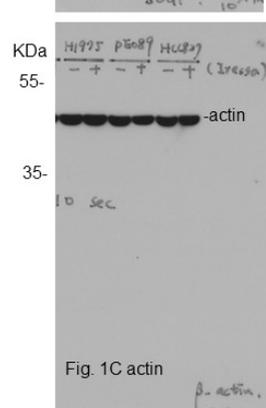


Fig. 1C actin

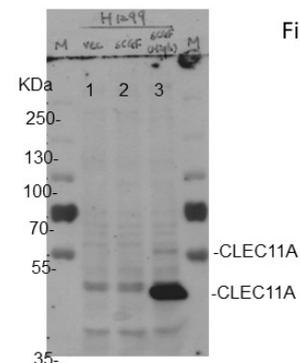


Fig3A CLEC11A (extract)

1: H1299-Vec
2: H1299-CLEC11A
3: H1299-L858R (high)

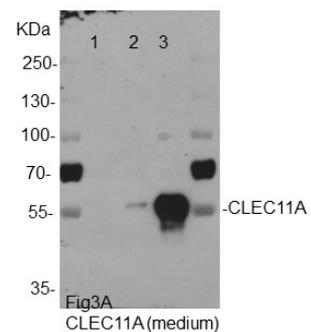
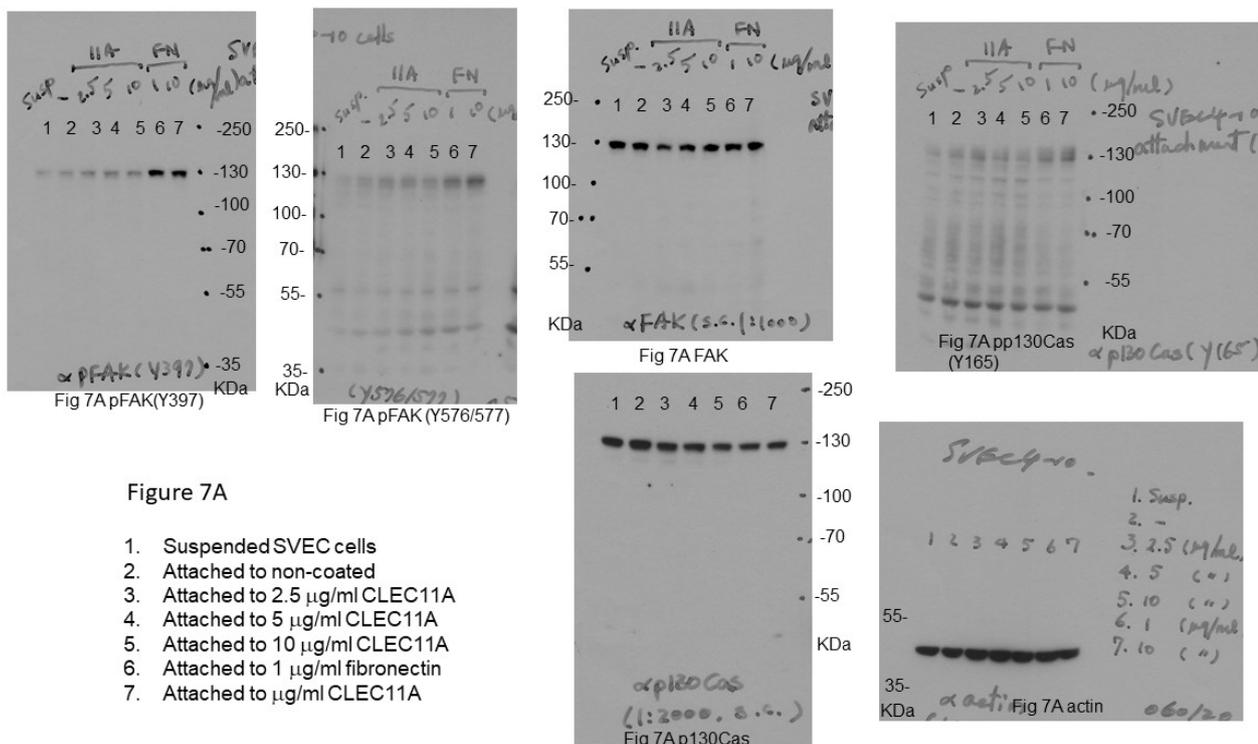
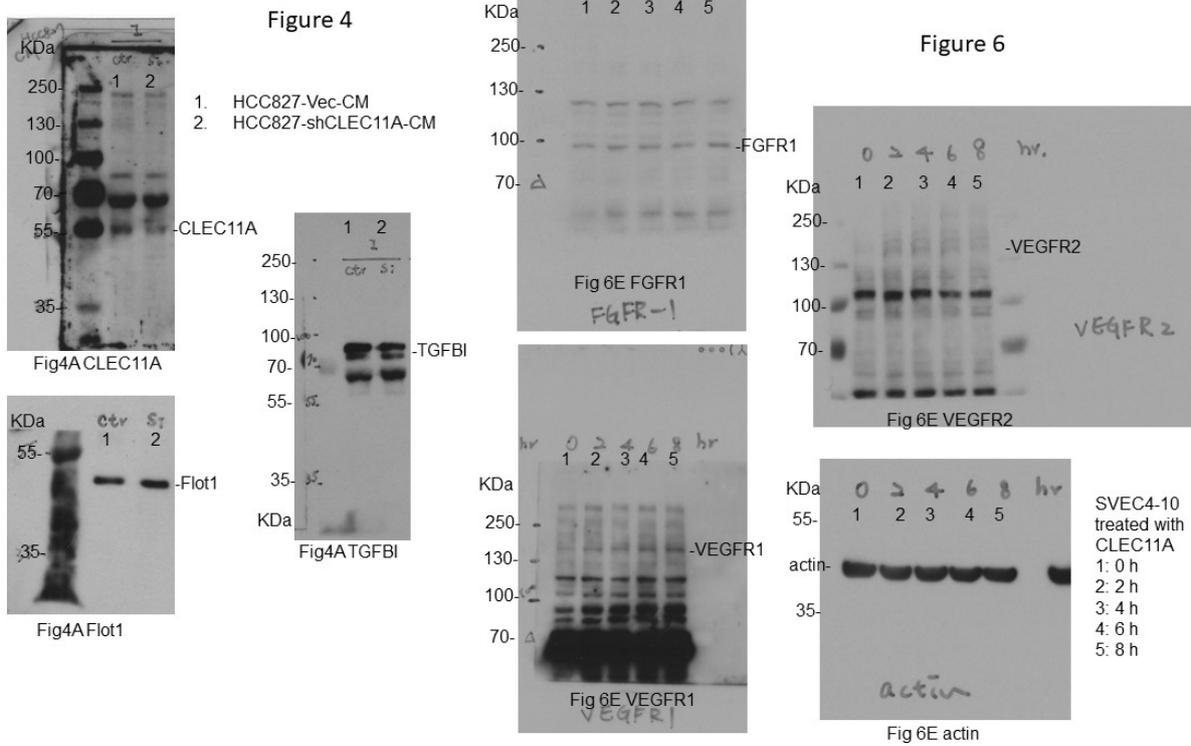


Fig3A CLEC11A (medium)

Figure 3

Uncropped immunoblots



Uncropped immunoblots

Figure 7C

