

iScience, Volume 26

## **Supplemental information**

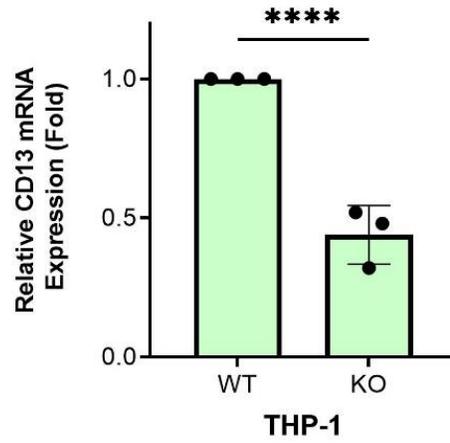
### **Cancer-specific glycosylation of CD13**

**impacts its detection and activity**

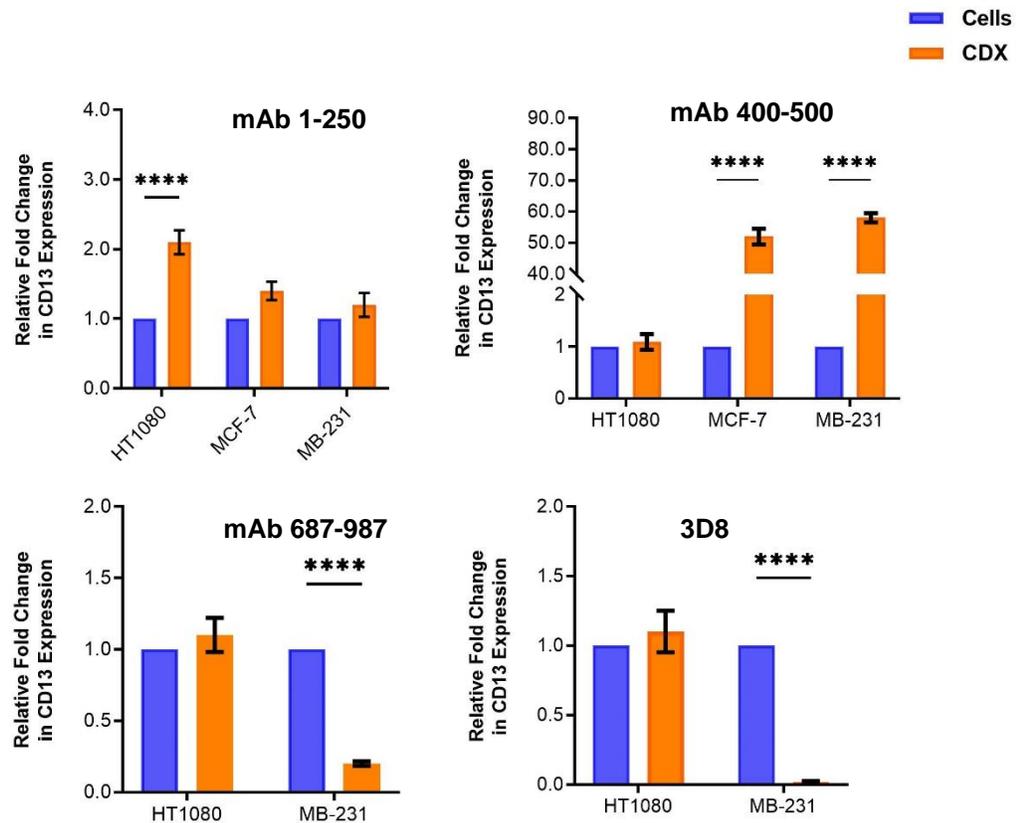
**in preclinical cancer tissues**

**Francis M. Barnieh, Sebastian P. Galuska, Paul M. Loadman, Simon Ward, Robert A. Falconer, and Sherif F. El-Khamisy**

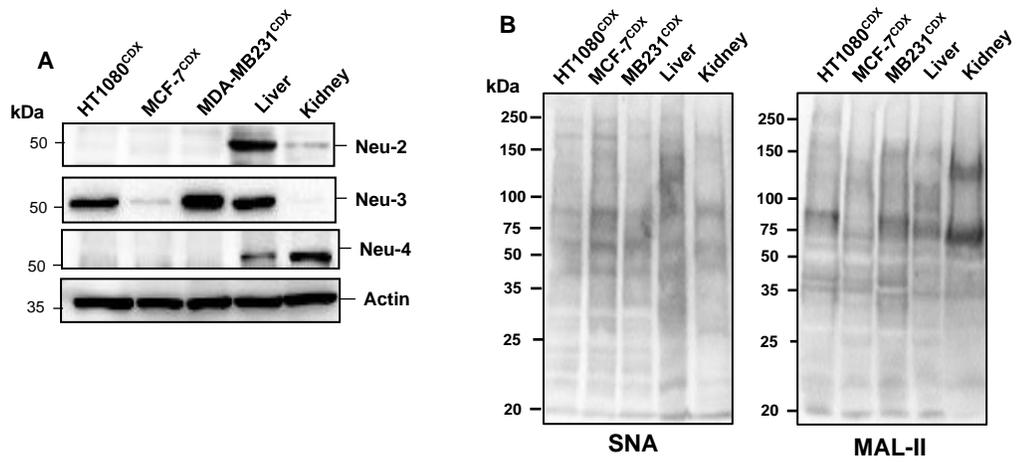
**Supplementary Information**



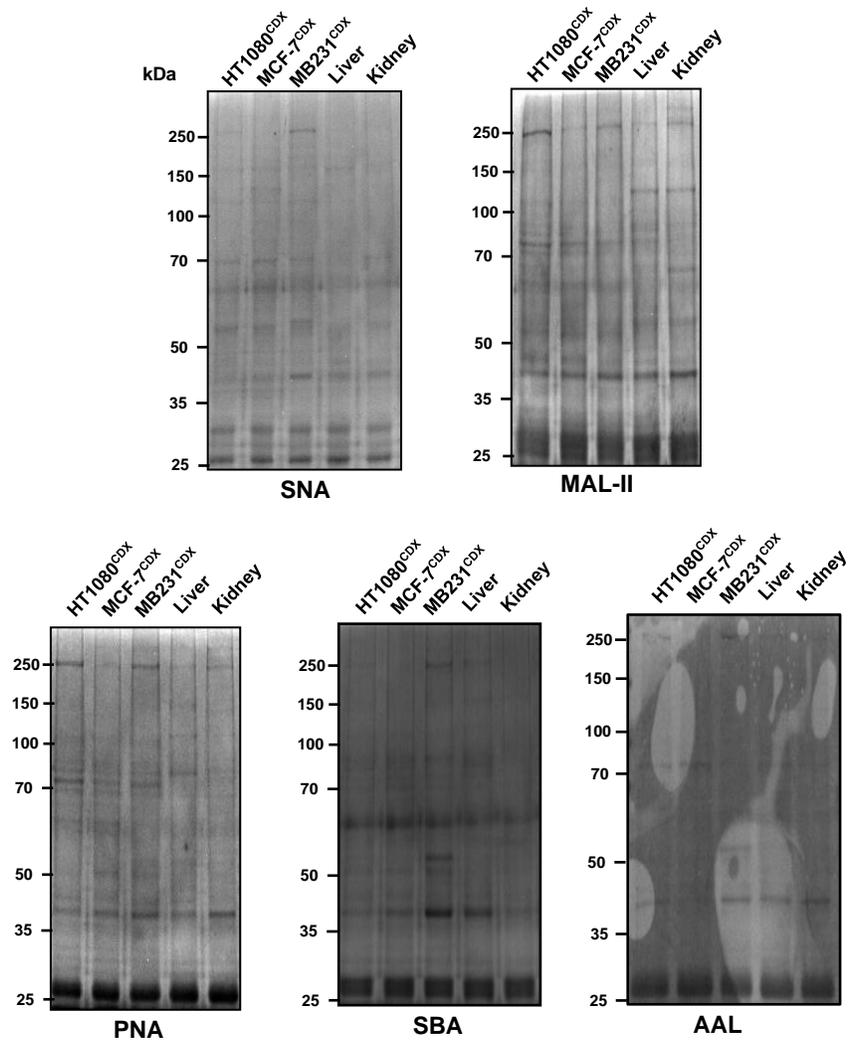
**Fig. S1.** CD13 mRNA expression in CD13-CRISPR knockout THP-1 cells relative to expression in THP-1 wildtype cells



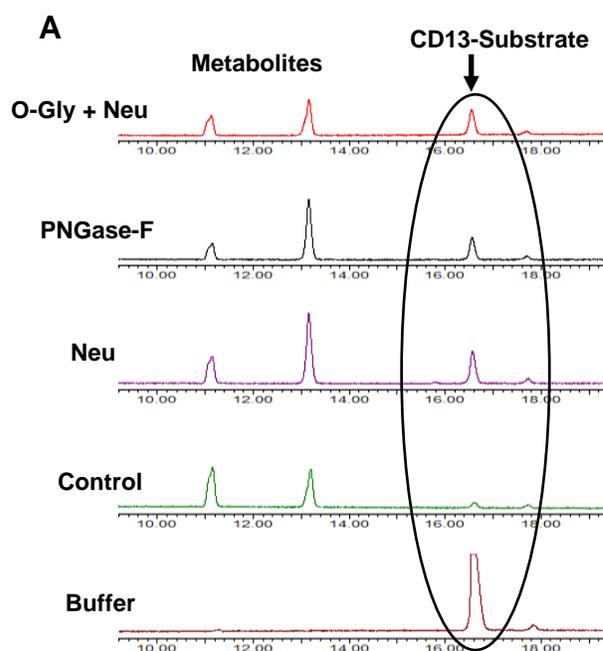
**Figure S2.** Quantified fold-change of CD13 protein expression in tumour xenograft relative to expression in their relative cell lines using different epitope-binding anti-CD13 antibodies. Mean fold-change in protein band intensity was measured using Image Lab Software 6.1 and normalised to a  $\beta$ -actin loading control.



**Figure S3.** Expression of neuraminidases and sialo-glycans in CDX and normal tissues (A) Differential expression of neuraminidases in tumour xenografts and normal tissues. (B) SNA and MAL-II lectin blot of tumour xenograft and normal tissues, to assess their binding affinity to  $\alpha$ 2,3 and  $\alpha$ 2,6 sialo-glycans respectively.



**Figure S4.** Coomassie staining of lectin affinity captured proteins in tumour xenograft and normal tissues.



**Figure S5.** LC-MS spectra of CD13 substrate metabolism in MCF-7 CDX homogenate in the presence specific glycosidases.

**Table S1.** Lectins used in the study.

<b>Lectin</b>	<b>Catalogue Number</b>
<b>Maackia Amurensis Lectin II (MAL II), Biotinylated</b>	B-1265-1
<b>Sambucus Nigra Lectin (SNA), Biotinylated</b>	B-1305-2
<b>Peanut Agglutinin (PNA), Biotinylated</b>	B-1075-5
<b>Soybean Agglutinin (SBA), Biotinylated</b>	B-1015-5
<b>Aleuria Aurantia Lectin (AAL), Biotinylated</b>	B-1395-1
<b>Ulex Europaeus Agglutinin I (UEA I), Biotinylated</b>	B-1065-2