Identification of microRNAs specific for high producer CHO cell lines using steady-state cultivation

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Table S1: Primers used for qRT-PCR

| Target	Primer sequence (5'–3') or Qiagen miScript Primer Assay
Actr5 sense	CTCCTTCCAGGTTCAGCTTG
Actr5 antisense	GGCACAATGTTCCTTGAGGT
Gapdh sense	GTAAGAAGCCCACCCTGGA
Gapdh antisense	GTGAGGGAGATGATCGGTGT
3D6scFv-Fc sense	CCCAAGCTGCTGATCTACAA
3D6scFv-Fc antisense	GATGGTCAGGGTGAACTCG
HSA sense	CCTGGAAGTGGACGAGACATAC
HSA antisense	GTCTGCTTCTTGATCTGCCTTT
let-7b-5p	MS00001225
let-7c-5p	MS00005852
miR-100-5p	MS00032214
miR-10b-5p	MS00032249
miR-125b-5p	MS00005992
miR-19a-3p	MS00001302
miR-185-5p	MS00001736
miR-193a-3p	MS00001785
miR-21-5p	MS00011487
miR-221-3p	MS00032585
miR-350-3p	MS00007938
miR-99a-5p	MS00033117
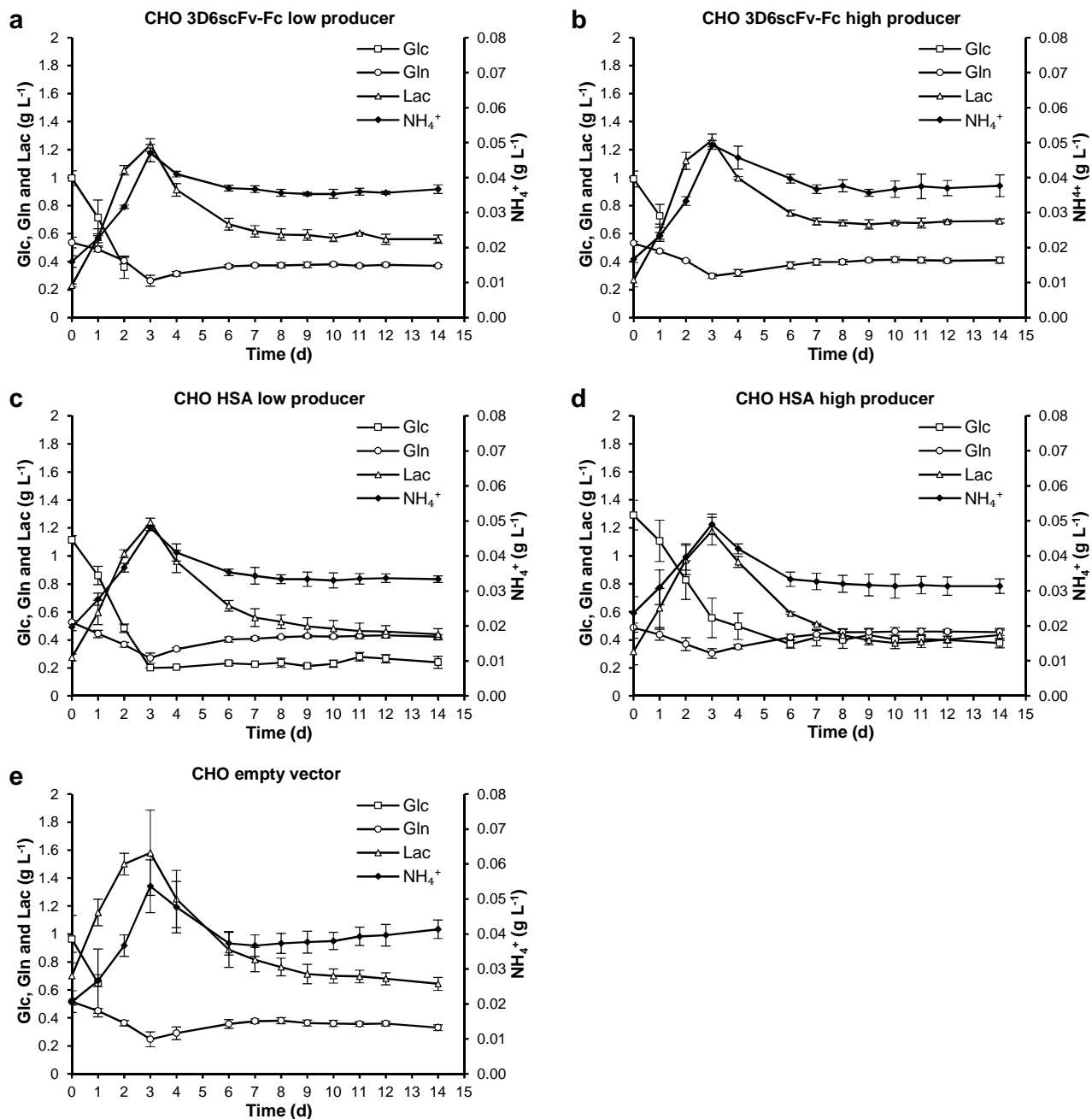
Fig. S1 Time courses of steady-state cultivations. Glucose (Glc), glutamine (Gln), lactate (Lac) and ammonium (NH_4^+) concentration of (**a**) CHO 3D6scFv-Fc low-producer, (**b**) CHO 3D6scFv-Fc high-producer, (**c**) CHO HSA low-producer, (**d**) CHO HSA high-producer and (**e**) CHO empty vector (non-producer). Cells were cultivated in a 0.8 L cell culture bioreactor. After three days of batch cultivation, the process was switched to continuous cultivation (dilution rate D = 0.5 d^{-1}). The culture volume was maintained at a constant level of 400 mL. Data represent mean values of three independent cultivations (error bars: SD). No data points are shown for glucose concentration below the detection limit of 0.2 g L^{-1}
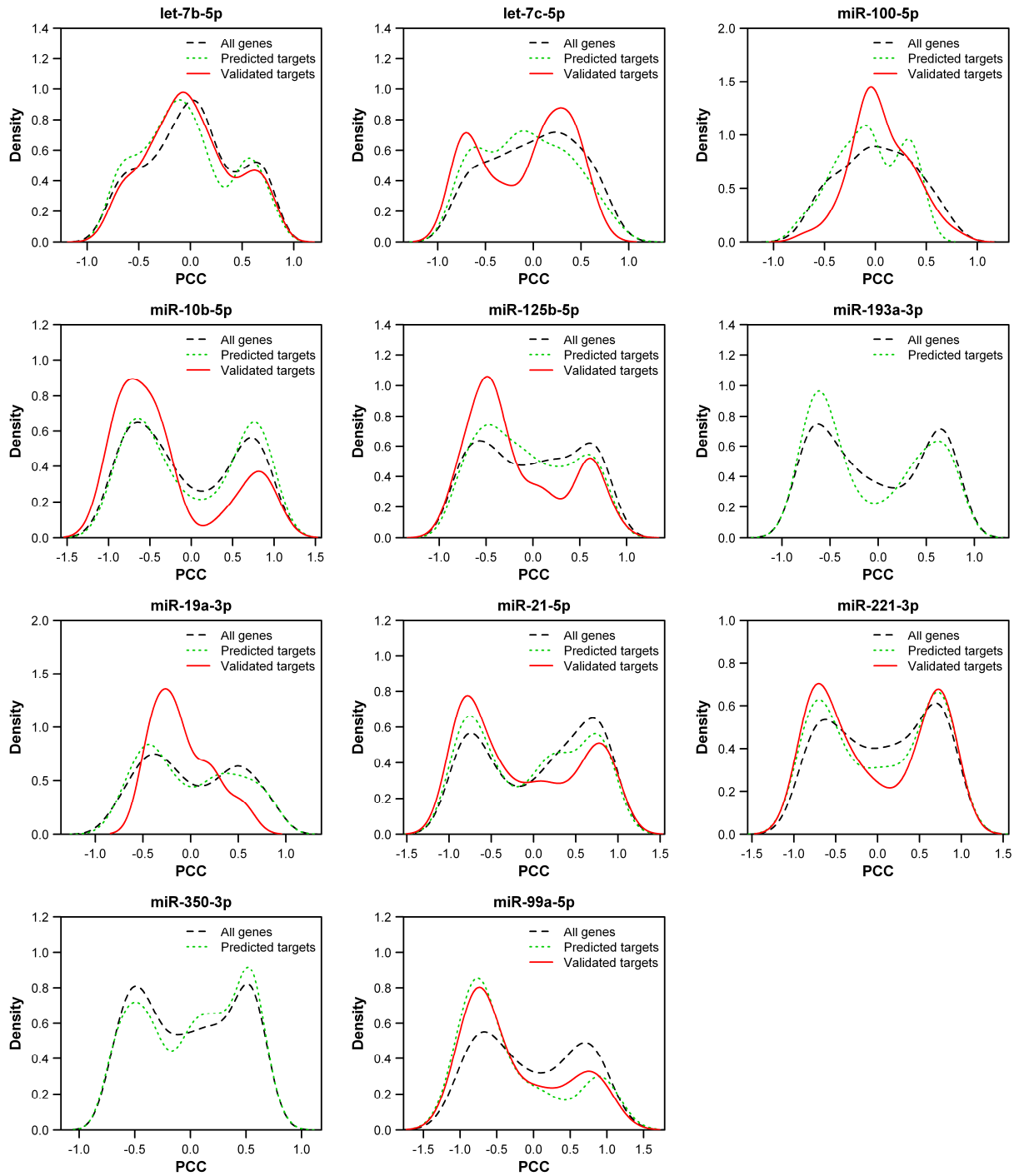
Fig. S2 Distribution of Pearson correlation coefficients (PCC) between miRNAs and validated or predicted targets. Superimposed kernel density plots were computed with equal bandwidths. All genes: 2843 mRNAs which were identified as differentially expressed (adj. $p < 0.05$ and fold change > 1.5) between the cell lines used in this study. Predicted targets: Differentially expressed target mRNAs that were computationally predicted by more than half of nine applied algorithms. Validated targets: Differentially expressed target mRNAs which have been experimentally validated in human, mouse or rat (miRTarBase 4.5)