Supporting Information for

Original article

***In situ* synthesis and unidirectional insertion of membrane proteins in liposome-immobilized silica stationary phase for rapid preparation of microaffinity chromatography**

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    E-mail addresses: yfchai@smmu.edu.cn (Yifeng Chai), nmxyyf@126.com (Yongfang Yuan), xfchen2010@163.com (Xiaofei Chen).
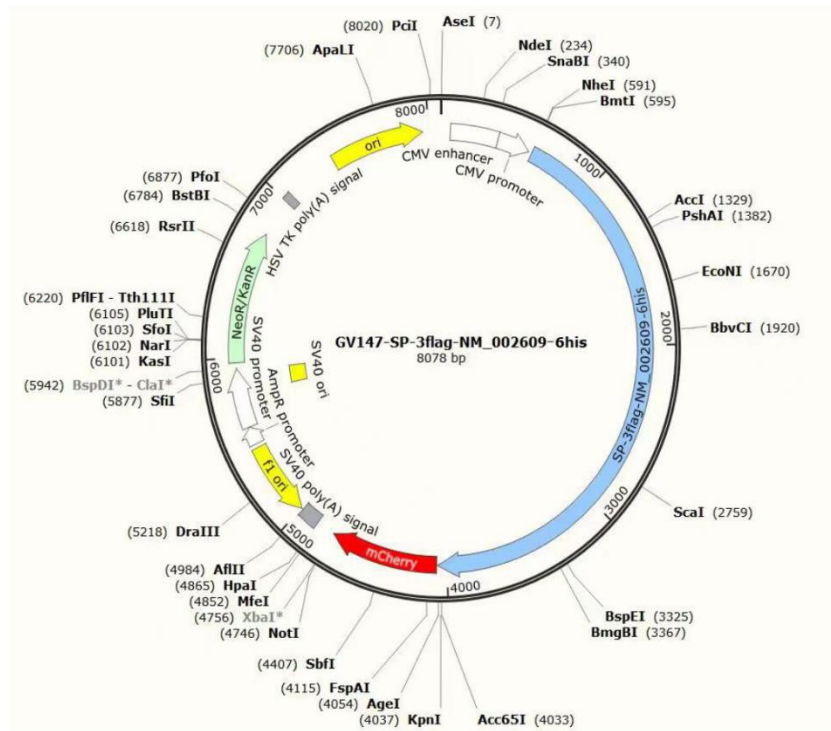
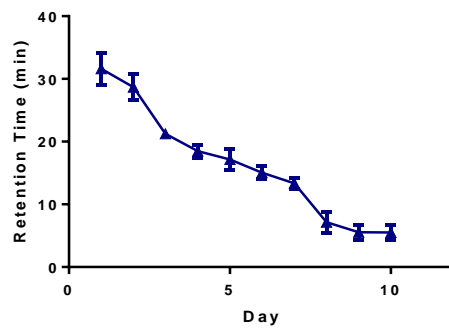**Figure S1** Construction of plasmid template of PDGFRβ.

Figure S2 RT of PDGF-BB on PDGFRβ columns within 10 days ($n = 3$). (Life and repeatability).
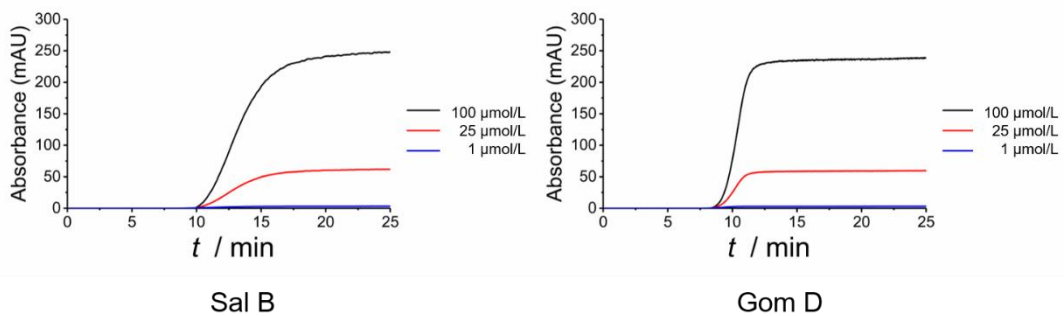

Sal B

Gom D

Figure S3 Frontal affinity breakthrough curves on an empty-PDGFRβ column: (A) Sal B, (B) Gom D.

As observed, the reduced breakthrough time of Sal B and Gom D was constant regardless of the ligand concentration, which confirms non-specific interactions. From here, t_0 of Sal B and Gom D were separately determined as 9.97 and 8.43 min.
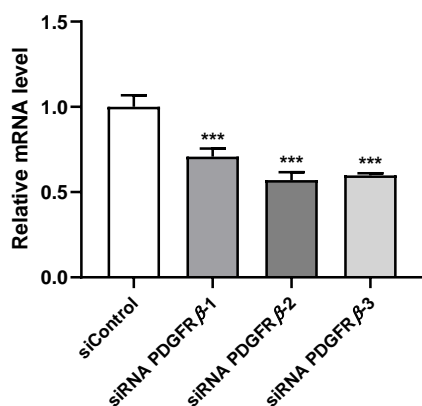

Figure S4 Validation of PDGFRβ knockdown by siRNA PDGFRβ in HSC-T6 cells.
Quantitative RT-PCR analysis of PDGFRβ mRNA expression after transfection with siRNA PDGFRβ in HSC-T6 cells, n=4. Data are shown as mean ± SD. [***]P<0.001 *versus* siControl group.

Table S1 Sequences of RNAi assays.

RNAi Name	Species Specificity	Sequences
siRNA PDGFRβ-1	Rat	CCGATACTTACTATGTCTA
siRNA PDGFRβ-2	Rat	CAGCTAGAAACGAACGTGA
siRNA PDGFRβ-3	Rat	GACCAGTTCTACAATGCCA

Table S2 Sequence of primers for quantitative RT-PCR analysis.

Name	NCBI Gene ID	Species Specificity	Sequences of Primers
GAPDH	24383	Rat	forward 5′- GACATGCCGCCTGGAGAAAC-3′
			reverse 5′-AGCCCAGGATGCCCTTTAGT-3′
α-SMA	59086	Rat	forward 5′-CCAGGGAGTGATGGTTGGA-3′
			reverse 5′-CCGTTAGCAAGGTCGGATG-3′
collagen I	29393	Rat	forward 5′-TGTTGGTCCTGCTGGCAAGAATG-3′
			reverse 5′-GTCACCTTGTTCGCCTGTCTCAC-3′
PDGFRβ	24629	Rat	forward 5′-CTTGTTCTGGGACGCACTCTTGG-3′
			reverse 5′-GCTTCTCACTGCTTCTGGCTGTAG-3′