Fig. 3a

Western blot analysis

Group	Mean Value	Standard deviation	Confidence Level
AF-MSCs	1	0	95%
AF-MSC shscramble	0.9	0.1	95%
AF-MSC shANXA1	0.6	0.1	95%

AF-MSCs vs AF-MSC shscramble: p=0.17

AF-MSCs vs AF-MSC shANXA1: p= 0.0002

AF-MSC shscramble vs AF-MSC shANXA1: p= 0.003

* Mean values were expressed after normalization with AF-MSCs, which is the control group.

Fig. 3b

ELISA analysis

Group	Mean Value (ng/ml)	Standard deviation	Confidence Level
AF-MSC shscramble	5.6	1.1	95%
AF-MSC shANXA1	1.3	0.5	95%

AF-MSC shscramble vs AF-MSC shANXA1: p= 3.8×10^{-5}

Fig. 3c

Western blot analysis

Group	Mean Value	Standard deviation	Confidence Level
AF-MSC shscramble	10.8	0,91	95%
AF-MSC shANXA1	2.1	0.19	95%

AF-MSC shscramble vs AF-MSC shANXA1: p= 0.03

Fig. 4a

Proliferation Rate

Day 3			
Group	**Mean Value**	**Standard deviation**	**Confidence Level**
AF-MSCs	85.4	19.3	95%
AF-MSC shscramble	60.5	7.9	95%
AF-MSC shANXA1	22.7	9.6	95%

AF-MSCs vs AF-MSC shscramble: p=0.1

AF-MSCs vs AF-MSC shANXA1: p= 0.002

AF-MSC shscramble vs AF-MSC shANXA1: p= 0.002

Day 5			
Group	**Mean Value**	**Standard deviation**	**Confidence Level**
AF-MSCs	156.95	9	95%
AF-MSC shscramble	155.6	18.7	95%
AF-MSC shANXA1	85.5	30.9	95%

AF-MSCs vs AF-MSC shscramble: p=0.9

AF-MSCs vs AF-MSC shANXA1: p= 0.012

AF-MSC shscramble vs AF-MSC shANXA1: p= 0.018

Day 7			
Group	**Mean Value**	**Standard deviation**	**Confidence Level**
AF-MSCs	196.9	23	95%
AF-MSC shscramble	194.8	40.9	95%
AF-MSC shANXA1	80.4	22.4	95%

AF-MSCs vs AF-MSC shscramble: p=0.94

AF-MSCs vs AF-MSC shANXA1: p= 0.001

AF-MSC shscramble vs AF-MSC shANXA1: p= 0.005

Fig. 4c

Clonogenic potential

Group	Mean Value (CFU-F/100 cells)	Standard deviation	Confidence Level
AF-MSCs	9.2	0.72	95%
AF-MSC shscramble	6.9	2.02	95%
AF-MSC shANXA1	2.6	0.8	95%

AF-MSCs vs AF-MSC shscramble: p=0.14

AF-MSCs vs AF-MSC shANXA1: p= 0.0004

AF-MSC shscramble vs AF-MSC shANXA1: p= 0.02

Fig. 4d

Migratory potential

Group	Mean Value (%)	Standard deviation	Confidence Level
AF-MSCs	100	0	95%
AF-MSC shscramble	87.1	16.9	95%
AF-MSC shANXA1	37.1	20	95%

AF-MSCs vs AF-MSC shscramble: p=0.3

AF-MSCs vs AF-MSC shANXA1: p= 0.0015

AF-MSC shscramble vs AF-MSC shANXA1: p= 0.009

* Mean values were expressed after normalization with AF-MSCs, which is the control group.

Fig. 4e

Differentiation potential

Group	Mean Value	Standard deviation	Confidence Level
HPL	886.7	146.8	95%
HPL shscramble	873.7	41.7	95%
HPL shANXA1	597.2	41.5	95%

HPL vs HPL shscramble: p= 0.87

HPL vs HPL shANXA1= p= 0.02

HPL shscramble vs HPL shANXA1: p= 0.0003

Fig. 5b

Serum AST and ALT levels

AST (SGOT)			
Group	Mean Value (U/L)	Standard deviation	Confidence Level
control	196.8	25.2	95%
AHF	923.8	710.7	95%
shscramble-CM	263.6	139.6	95%
shANXA1-CM	547.6	225.8	95%

AHF vs shscramble-CM: p=0.013

AHF vs shANXA1-CM: p= 0.027

ALT (SGPT) (U/L)			
Group	Mean Value (U/L)	Standard deviation	Confidence Level
control	54.4	25.3	95%
AHF	1025	644.4	95%
shscramble-CM	129.3	51.8	95%
shANXA1-CM	743.5	392	95%

AHF vs shscramble-CM: p= 0.006

AHF vs shANXA1-CM: p= 0.028

Fig. 5c

Mouse serum cytokine levels (IFN - γ, TNF, IL-10)

IFN-γ			
Group	Mean Value (pg/ml)	Standard deviation	Confidence Level
control	40.1	16.7	95%
AHF	106.5	8.5	95%
shscramble-CM	67.2	11.8	95%
shANXA1-CM	125.1	392	95%

control vs AHF: p= 8×10^{-5}

shscramble-CM vs AHF: p= 0.001

shANXA1-CM vs shscramble-CM: p= 0.5

TNF			
Group	Mean Value (pg/ml)	Standard deviation	Confidence Level
control	52.9	3.6	95%
AHF	258.9	58	95%
shscramble-CM	153.9	27.9	95%
shANXA1-CM	189.1	.18.3	95%

control vs AHF: p= 0.01

shscramble-CM vs AHF: p= 0.03

shANXA1-CM vs shscramble-CM: p= 0.05

IL-10			
Group	Mean Value (pg/ml)	Standard deviation	Confidence Level
control	10.39	3.7	95%
AHF	90.2	10.6	95%
shscramble-CM	106.4	8.9	95%
shANXA1-CM	88.4	15.6	95%

control vs AHF: p= 0.001

shscramble-CM vs AHF: p= 0.05

shANXA1-CM vs shscramble-CM: p= 0.05

Fig. 6

Mouse oval cell proliferation

Growth Rate of oval cells %			
Group	Mean Value	Standard deviation	Confidence Level
DMEM (0.5% FBS)	11.9	5.4	95%
DMEM (20% FBS)	31.9	11.5	95%
CM	25.3	16.4	95%
shscramble-CM	13.8	3.5	95%
shANXA1-CM	-7.1	3.5	95%

CM vs DMEM (20% FBS): p= 0.26

CM vs shscramble-CM: p= 0.08

CM vs shANXA1-CM: p= 0.001

Supplementary Fig. 1

PCR analysis for a-fetoprotein, albumin and tyrosine aminotransferase expression levels

a-Fetoprotein			
Group	Mean Value	Standard deviation	Confidence Level

| AF-MSCs | 1 | 0 | 95% |
| HPL cells | 2.05 | 0.35 | 95% |

Albumin			
Group	Mean Value	Standard deviation	Confidence Level
AF-MSCs	1	0	95%
HPL cells	3.48	0.93	95%

Tyrosine Aminotransferase			
Group	Mean Value	Standard deviation	Confidence Level
AF-MSCs	1	0	95%
HPL cells	6.8	2.85	95%