S1 Table: List of primers used for PCR

Sno	Primers	Sequence (5'-3')
1	RBM47 Fwd	ATCAGCAATCCTTGGCTCAC
2	RBM47 Rev	CCTTGGGATTCCTCTGTTCA
3	RBM47 pro ChIP HRE1 Fwd	CCACTTCTGAACGAGCAGC
4	RBM47 pro ChIP HRE1 Rev	CGGGGCGTCCTTACCTG
5	RBM47 pro ChIP HRE2 Fwd	CAGGTAAGGACGCCCCG
6	RBM47 pro ChIP HRE2 Rev	CCCGCTCCCCTTCTTCC
7	RBM47 pro ChIP HRE3 Fwd	CTTGTTTATGGGGGGAAGAAGG
8	RBM47 pro ChIP HRE3 Rev	GCATCTGTCCGAGTCAGAC
9	RBM47 pro ChIP HRE4 Fwd	AGGAGAGAGGGAGGGAACC
10	RBM47 pro ChIP HRE4 Rev	GCAGCGAAGTTCTCTCGG
11	FN1 exon24 Fwd (semiq)	CCAGCAGGGAAATTCTTTG
121	FN1 exon26 Rev (semiq)	CAGGAAGTTGGTTAAATCAATG
13	FN1 exon32 Fwd (semiq)	AGCCCACAGTGGAGTATGTG
14	FN1 exon34 Rev (semiq)	CATAAGTCCTGATACAACCACG
15	FN1 exon25 Fwd (qPCR)	GTAGGATACTACACAGTCACAGG
16	FN1 exon25/26 Rev (qPCR)	GAGGAACAGCCGTTTGTTGTG

17	FN1 cons Fwd	GATGCTCCCACTAACCTC
18	FN1 cons Rev	GGATACGGTGTACTCAGATG
19	FN1 PAR-CLIP qPCR Fwd	CAATGATGGCAAAAAGGTTAAAGGG
20	FN1 PAR-CLIP qPCR Fwd	GTCAGTGGGAGGAGGAACAG
21	RPS16 Fwd	AAACGCGGCAATGGTCTCATCAAG
22	RPS16 Rev	TGGAGATGGACTGACGGATAGCAT
23	GAPDH Fwd	TCGACAGTCAGCCGCATCTTCTTT
24	GAPDH Rev	ACCAAATCCGTTGACTCCGACCTT

S2 Table: List of primers used for cloning

Sno	**Primers**	**Sequence (5'-3')**
1	RBM47 luc -722 Fwd	TTTTGGTACCATGAGCCACTTCTGAACGAGCAGC
2	RBM47 luc +118 Rev	TTTTAAGCTTCGAAGTTCTCTCGGGCTCAGCTC
3	RBM47 luc HRE1 SDM Fwd	GTCAGGGCCCCGTCCGTTTTACGCTCCTGCCTGCGCGC
4	RBM47 luc HRE1 SDM Rev	GCGCGCAGGCAGGAGCGTAAAACGGACGGGGCCCTGAC
5	RBM47 luc HRE3 SDM Fwd	CAGGTTCCTAATTTCTCCAATTTTGTTCTGGCTGGGTTTCTCG
6	RBM47 luc HRE3 SDM Rev	CGAGAAACCCAGCCAGAACAAAATTGGAGAAATTAGGAACCTG

7	RBM47 OE Fwd	CCCAAGCTTATGACCGCAGAGGATTCCACC
8	RBM47 OE Rev	CCGCTCGAGTCAGTATGTCTGGTAGACGTCGG
9	FN1OE insert Fwd	ATTCTGCAGTCGACGGTACCATGCTTAGGGGTCCGGGG
10	FN1OE insert Rev	ACCATGGTGGCGACCGGTGGgatccgctcccgcctccgcc CTCTCGGGAATCTTCTCTGTCAG
11	FN1OE vector Fwd	gcggaggcgggagcggatccCCACCGGTCGCCACCATGG
12	FN1OE vector Rev	GGCCCCGGACCCCTAAGCATGGTACCGTCGACTGCAGAATTCGA
13	FN1 minigene Fwd1	CTAGCTAGCATGGACATTACTGGTTATAGAATTACCACAACCC
14	FN1 minigene Rev1	GAAGTTTTCAAAATTCACCCCGTTTGTTGTGTCAG
15	FN1 minigene Fwd2	CTGACACAACAAACGGGGTGAATTTTGAAAACTTC
16	FN1 minigene Rev2	GGAGGAGGAACAGAGCTGGTTTCGAACAAGAAG
17	FN1 minigene Fwd3	CTTCTTGTTCGAAACCAGCTCTGTTCCTCCTCC
18	FN1 minigene Rev3	GCGGGATCCTTTGTTAAGACCACTGCATTGTCTGAAG
19	FN1 minigeneΔ1 Fwd	CGTTTGAGACATAGATGGTGTCTAGAGAAATACAGATGTCTG
20	FN1 minigeneΔ1 Rev	CAGACATCTGTATTTCTCTAGACACCATCTATGTCTCAAACG
21	FN1 minigeneΔ2 Fwd	CTGTCACTAGGTAAAGAAACTGTTTCTCTTTGCTGTGTG
22	FN1 minigeneΔ2 Rev	CACACAGCAAAGAGAAACAGTTTCTTTACCTAGTGACAG
23	FN1 minigeneΔ3 Fwd	GCCTAACAGTACTGTGTGTACTGAGTCTTCCTTCTTGTTC
24	FN1 minigeneΔ3 Rev	GAACAAGAAGGAAGACTCAGTACACACAGTACTGTTAGGC
25	CMV Fwd	CGCAAATGGGCGGTAGGCGTG
26	RBM47 dCASRx Fwd	CTAGCTAGCGGCGGAGGCGGGAGCGGATCCGTGGACAAG GAGCAGTACTC

27	RBM47 dCASRx Rev	CTAGCTAGCGTATGTCTGGTAGACGTCGG
28	Rfx dCas13 Fwd	TTTAAGAACCTGAGCATCGAGGC

S3 Table: List of oligos used for gRNA cloning

Sno	**Oligos**	**Sequence (5'-3')**
1	FN1 gRNA_1 Fwd	AAACGACAGTCTGGGGACAAGCATGCAACAT
2	FN1 gRNA_1 Rev	AAAAATGTTGCATGCTTGTCCCCAGACTGTC
3	FN1 gRNA_2 Fwd	AAACGTGCTGTGCATGGGAAAAGAAACATGCT
4	FN1 gRNA_2 Rev	AAAAAGCATGTTTCTTTTCCCATGCACAGCAC
5	FN1 gRNA_3 Fwd	AAACGCTGAGAACCAATTTGCATGAACA
6	FN1 gRNA_3 Rev	AAAATGTTCATGCAAATTGGTTCTCAGC
7	FN1 gRNA_4 Fwd	AAACGCTGTGTGCATGTATTTCTTTGTA
8	FN1 gRNA_4 Rev	AAAATACAAAGAAATACATGCACACAGC
9	gRNA_control Fwd	AAACGACGGAGGCTAAGCGTCGCAA
10	gRNA_control Rev	AAAATTGCGACGCTTAGCCTCCGTC

S4 Table: List of shRNA used for knockdown

S No.	Gene	Sequence
1	sh*RBM47*_1	CCGGCTTCGTCATGTACTGCCACAACTCGAGTTGTGGCAGTACA TGACGAAGTTTTTG

2	sh*RBM47*_2	CCGGGATGAAGAAGCGCGAGGAAATCTCGAGATTTCCTCGCGCTTCTTCATCTTTTTG
3	sh*HIF1A*_1	CCGGCGGCGAAGTAAAGAATCTGAACTCGAGTTCAGATTCTTTACTTCGCCGTTTTT
4	sh*HIF1A*_2	CCGGTGCTCTTTGTGGTTGGATCTACTCGAGTAGATCCAACCACAAAGAGCATTTTT
5	shControl	CCGGCGTGATCTTCACCGACAAGATCTCGAGATCTTGTCGGTGAAGATCACGTTTTT

Supplementary fig S1

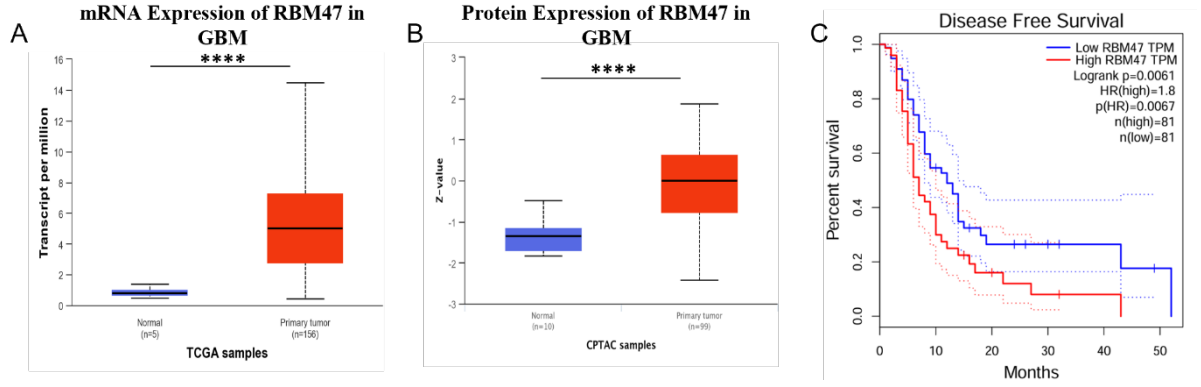

Fig.1 A TCGA dataset showing mRNA expression of RBM47 in normal vs primary tumor (GBM). **B** CPTAC dataset showing protein expression of RBM47 in normal vs primary tumor (GBM). **C** The Kaplan-Meier curve shows a positive correlation between RBM47 and disease-free survival in GBM. *P ≤ 0.05, **P ≤ 0.01, ***P ≤ 0.001, ns, not significant.

Supplementary fig S2

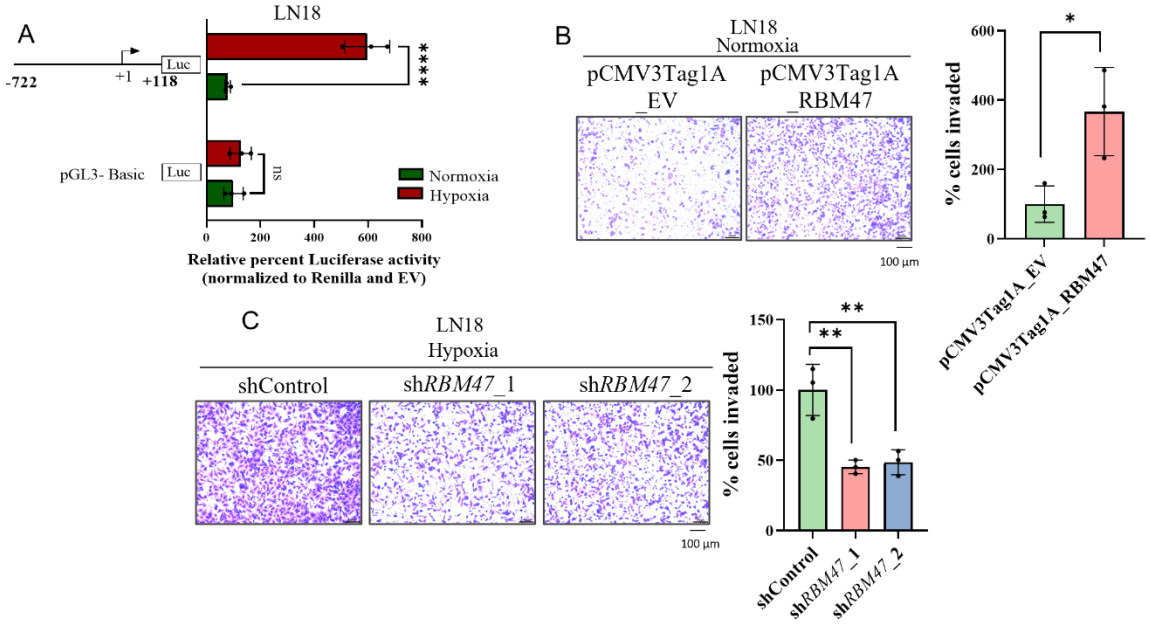

Fig.S2 A Dual luciferase assay performed using RBM47 promoter construct under normoxia and hypoxia for 24h in LN18 cells. **B** Invasion assay performed in RBM47 overexpressing U87MG cells under normoxic conditions. **C** Invasion assay performed in control and RBM47 knockdown U87MG cells under hypoxic conditions. Data represent mean ± SD (n = 3 biological replicates); two-tailed Student's t-test. *P ≤ 0.05, **P ≤ 0.01, ***P ≤ 0.001, ns = not significant.

Supplementary fig S3

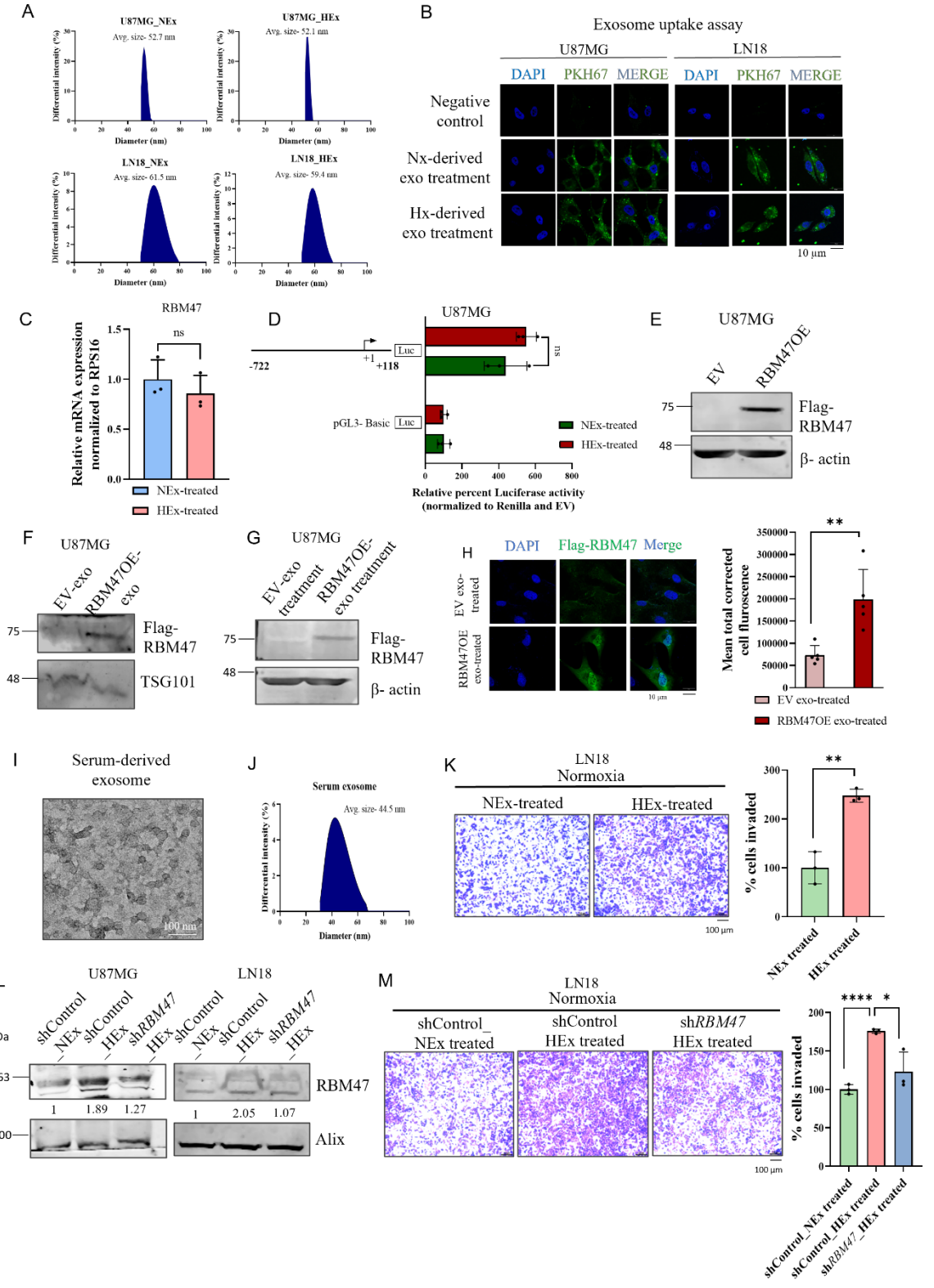

Fig.S3 A Particle size characterization by DLS. **B** Exosome uptake assay using PKH67 dye showing successful exosome uptake in U87MG and LN18 cells. **C** qRT-PCR analysis of RBM47 in U87MG cells treated with normoxia and hypoxia-derived exosomes. **D** Dual luciferase assay of RBM47 promoter construct in U87MG cells treated with normoxia and hypoxia-derived exosomes. **E** Immunoblot depicting Flag-RBM47 overexpression and

F detection of Flag-RBM47 in exosomes isolated from U87MG cells overexpressing Flag-RBM47. **G** Immunoblot analysis of U87MG cells treated with exosomes isolated from control and Flag-RBM47 overexpressing cells. **H** Immunofluorescence of U87MG cells treated with exosomes isolated from control and Flag-RBM47 overexpressing cells. **I** and **J** Characterization of exosomes isolated from serum using TEM and DLS. **K** Invasion assay performed following the treatment with normoxia and hypoxia-derived exosomes in LN18 cells. **L** Immunoblot of exosomes isolated from control and RBM47 knockdown cells. **M** Invasion assay performed in cells treated with exosomes isolated from control and RBM47 knockdown LN18 cells. Data represent mean ± SD (n = 3 biological replicates); two-tailed Student's t-test. *P ≤ 0.05, **P ≤ 0.01, ***P ≤ 0.001, ns = not significant.

Supplementary fig S4

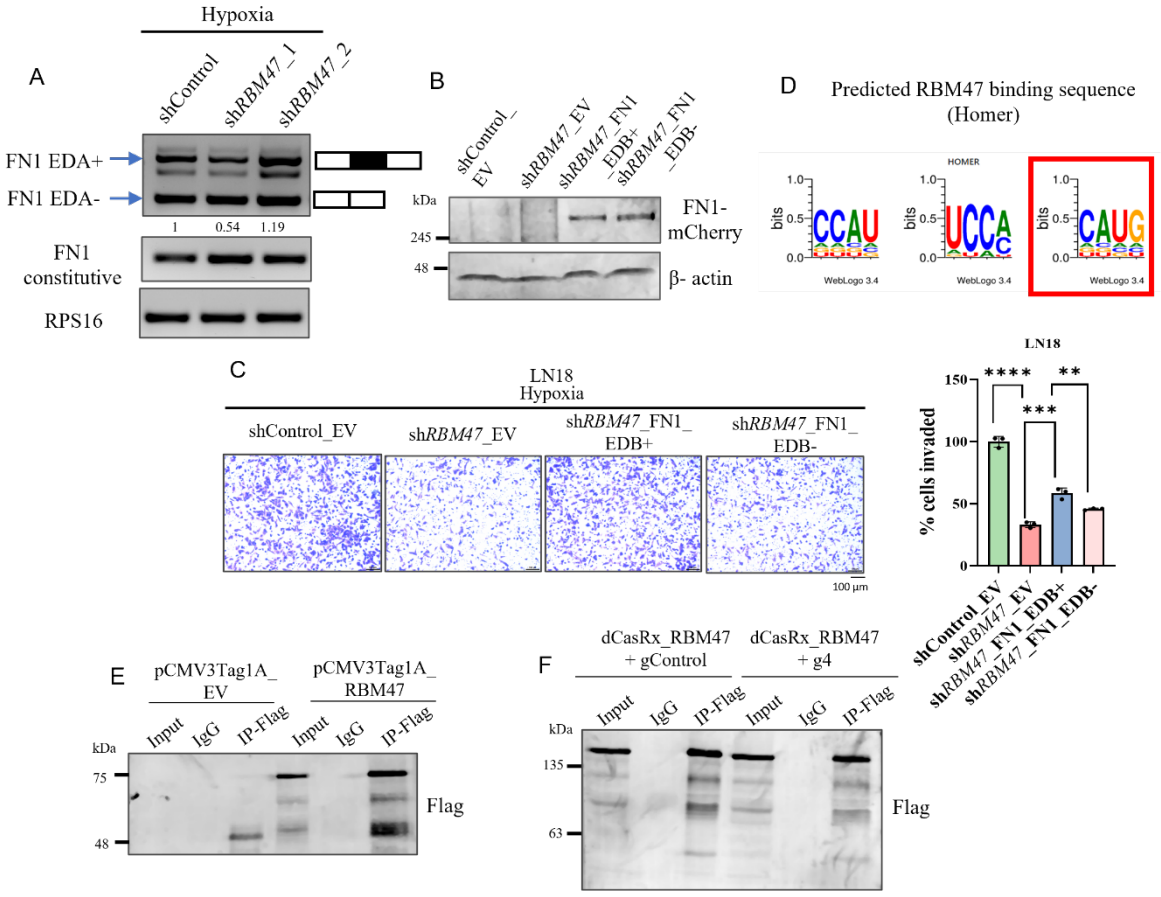

Fig.S4 A Semi-quantitative PCR to check FN1 isoform EDA+ or EDA- under RBM47 knockdown in U87MG. **B** Immunoblot showing overexpression of FN1 EDB+ or EDB- isoform in RBM47 knockdown LN18 cells, and **C** invasion assay performed under normoxia. **D** RBM47-binding site as obtained from in-silico analysis using HOMER. **E** and **F** Immunoblot depicting successful pulldown of Flag-RBM47 for Par-CLIP in Figure 6B and 6I, respectively. Data represent mean ± SD (n = 3 biological replicates); two-tailed Student's t-test. *P ≤ 0.05, **P ≤ 0.01, ***P ≤ 0.001, ns = not significant.