

Figure S1. miR-106a-5p expression is upregulated in SCG. (A and B) Reverse transcription-quantitative PCR was used to analyze miR-106a-5p expression in tissue samples from 20 patients with high-grade spinal glioma, and adjacent normal spinal cord tissues were used as controls. All experiments were performed in triplicate. SCG, spinal cord glioma; NSC, normal spinal cord; miR, microRNA.

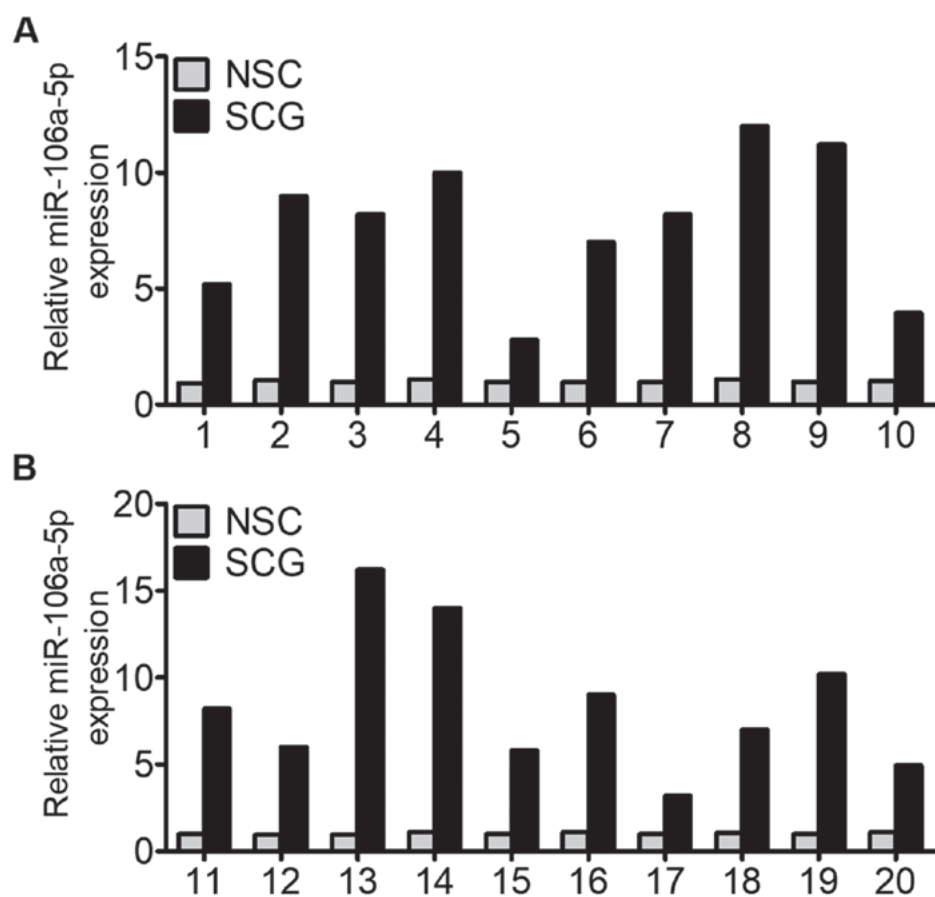


Figure S2. miR-106a-5p overexpression promotes the proliferation and inhibits the apoptosis of 0213SCG cells. Reverse transcription-quantitative PCR analysis of miR-106a-5p expression in 0213SCG cell lines transiently transfected with (A) miR-106a-5p inhibitor and (B) miR-106a-5p mimics. (C) MTT assays showed that overexpression of miR-106a-5p promoted the proliferation of 0213SCG cells. (D) Apoptosis was measured using the TUNEL assay in the Mimics, miCON and PBS groups. Scale bar, 50 μ m. Data are expressed as the mean \pm SEM. * P <0.05. All experiments were performed in triplicate. inCON, inhibitor negative control; miCON, mimics negative control; miR, microRNA; OD, optical density.

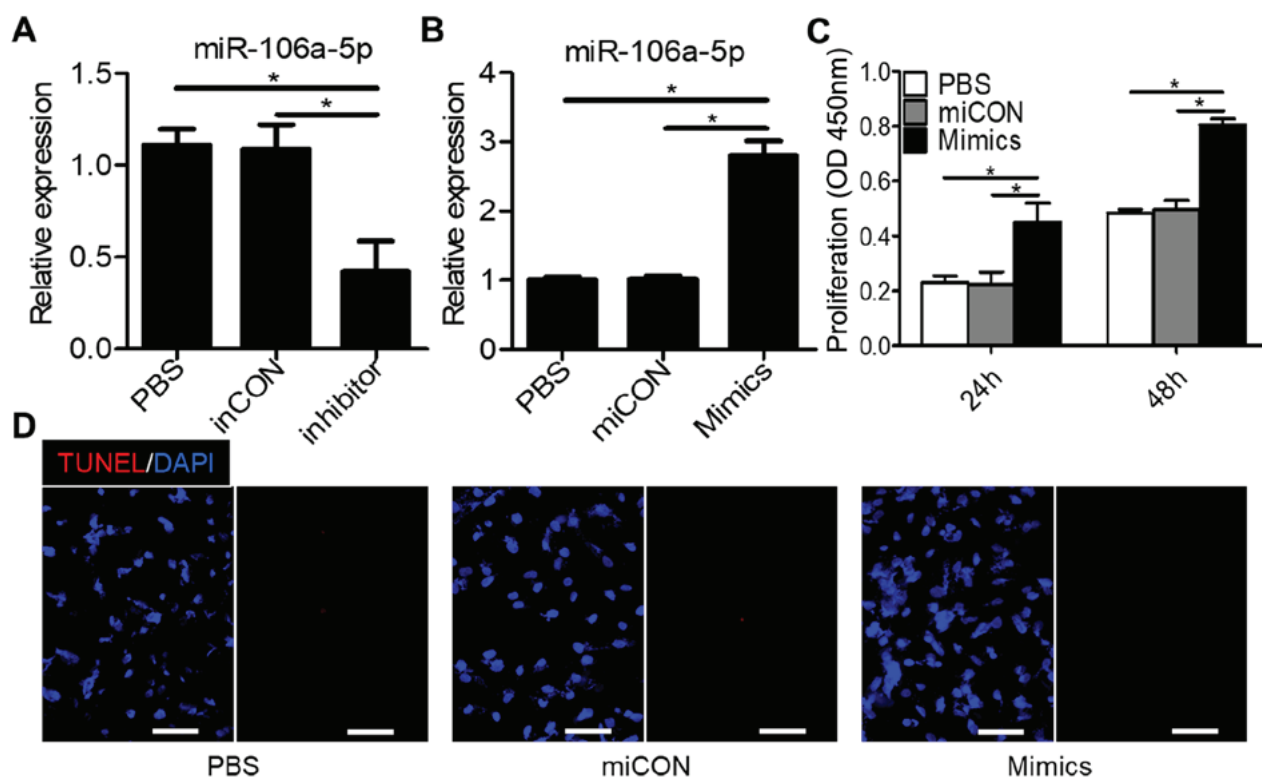


Figure S3. 3'-untranslated region sequences of 18 different species recognized by miR-106a-5p seed sequence in homology analysis obtained from TargetScan (www.targetscan.org).

5080.....5090.....5100.....5110.....5120.....5130.....
Human	--AAGGU-AA-UUAGAU-UUAGAAGUACUC-AGUCACUUUAAGUGGAUAAAUGUAUUAGUU-----
Chimp	--AAGGU-AA-UUAGAU-UUAGAAGUACUC-AGUCACUUUAAGUGGAUAAAUGUAUUAGUU-----
Rhesus	--AAGGU-AA-UUAGAU-UUAGAAGUACUC-AGUCACUUUAAGUGGAUAAAUGUAUUAGUU-----
Squirrel	--AAGGU-AA-UUAGAU-UUAGAAGUACUC-AGUCACUUUAAGUGGAUAAAUGUAUUAGUU-----
Mouse	--AAGAU-AA-UUAGAU-UUAGAAGUACUC-AGUCACUUUAAGUGGAUAAAUGUAUUAGUU-----
Rat	--AAGAU-AA-UUAGAU-UUAGAAGUACUC-AGUCACUUUAAGUGGAUAAAUGUAUUAGUU-----
Rabbit	--AAGGU-AA-UUAGAC-UUAGAAGUACUC-AGUCACUUUAAGUGGAUAAAUGUAUUAGUU-----
Pig	--AAGGU-AA-UUAGAU-UUAGAAGUACUCAAGUCACUUUAAGUGGAUAAAUGUAUUAGUU-----
Cow	--AAGGU-AA-UUAGAU-UUAGAAGUACUC-AGUCACUUUAAGUGGAUAAAUGUAUUAGUU-----
Cat	--AAGGU-AA-UUAGAU-UUAGAAGUACUC-AGUCACUUUAAGUGGAUAAAUGUAUUAGUU-----
Dog	--AAGGU-AA-UUAGAU-UUAGAAGUACUC-AGUCACUUUAAGUGGAUAAAUGUAUUAGUU-----
Brown bat	--AAGGU-AA-UUAGAU-UUAGAAGUACUC-AGUCACUUUAAGUGGAUAAAUGUAUUAGUU-----
Elephant	--AAGGU-AAUUUAGAU-UUAGAAGUACUC-AGUCACUUUAAGUGGAUAAAUGUAUUAGUU-----
Opossum	--AAGGU-AA-UUAGAA-UUAGGAGUACUC-AGUCACUUUAAGUGGAUAAAUGUAUUAGUU-----
Macaw	--AAGGU-AA-UUAGAA-UUAGGAGUACUC-GGUCACUUUGCGUGGAUAAAUGUAUUAGUU-----
Chicken	--AAGGU-AA-UUAGAG-UUAGGAGUACUC-AGUCACUUUGCGUGGAUAAAUGUAUUAGUU-----
Lizard	IAAAUA-AA-UUAGAAUUUAGGAGUACAC-AGUCACUUUACGUGGAUAAAUGUAUUAGUU-----
X. tropicalis	--AAGGU-AA-UUAGAG-UUAGGCGUACAC-AGUCACUUUAAGUGGAUAAAUGUAUUAGUA-----

Figure S4. Overexpression of CELF-2 promotes the apoptosis of tumor cells *in vivo*. (A) Apoptosis was measured using the TUNEL assay on day 20. (B) Quantitative analysis of apoptotic cells. Data are expressed as the mean \pm SEM. * $P < 0.05$ vs. Control. Scale bar, 50 μm . All experiments were performed in triplicate. CELF-2, CUGBP Elav-like family member 2; OE, overexpression; GFP, green fluorescent protein.

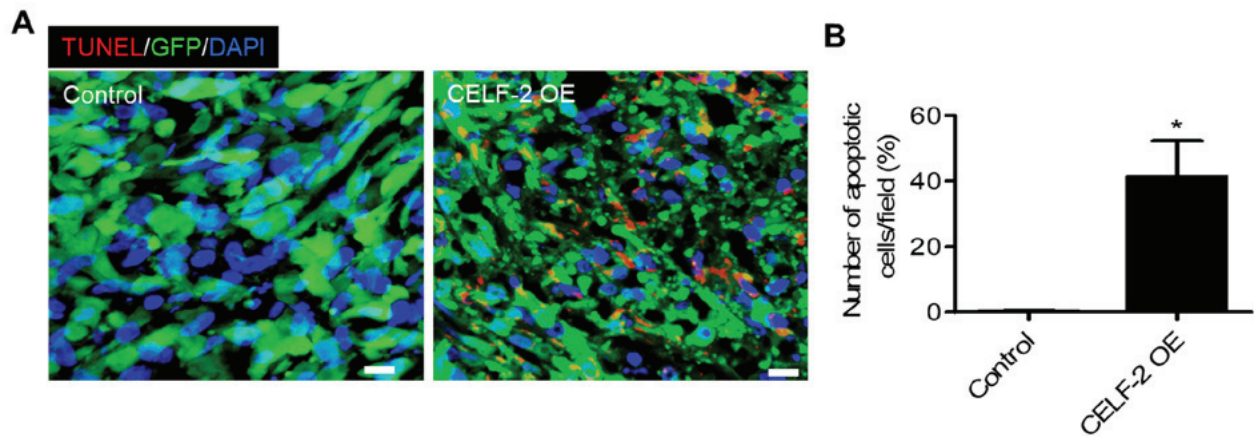


Table SI. Primers used for reverse transcription-quantitative PCR.

Gene	Sequence (5'-3')
CELF-2	Forward: GGAATTTGGAGACCAGGACAT Reverse: GCTTGGATAGCAGCTTGTGC
miR-21	Forward: GCCCGCTAGCTTATCAGACTGATG Reverse: GTGCAGGGTCCGAGGT
miR-10b	Forward: GGATACCCTGTAGAACCGAA Reverse: CAGTGCGTGTCTGGAGT
miR-95-3p	Forward: TGCGGTTCAACGGGTATTTATTG Reverse: CCAGTGCAGGGTCCGAGGT
miR-106a-5p	Forward: GATGCTCAAAAAGTGCTTACAGTGCA Reverse: TATGGTTGTTCTGCTCTCTGTCTC
miR-615-3p	Forward: ACACTCCAGCTGGGTCCGAGCCTGGGTCTC Reverse: TGGTGTCTGTGGAGTCG
miR-155	Forward: GCGGTTAATGCTAATCGTGAT Reverse: GTGCAGGGTCCGAGGT
U6	Forward: GCTTCGGCAGCACATATACTAAAAT Reverse: CGCTTCACGAATTTGCGTGTTCAT
GAPDH	Forward: AATGGGCAGCCGTTAGGAAA Reverse: GCGCCCAATACGACCAAATC

miR, microRNA; CELF-2, CUGBP Elav-like family member 2.

Table SII. Details of the spinal cord tissue samples from patients.

Sample no.	Age, years	Sex	Range of dates of patient enrolment	Approval no.
Patient 02-01	56	Male	19/02/2017-06/03/2017	2017AA02A190
Patient 02-02	60	Female	25/02/2017-20/03/2017	2017AA02A250
Patient 02-03	47	Male	26/03/2017-09/04/2017	2017AA03A260
Patient 02-04	55	Male	15/04/2017-26/04/2017	2017AA04A150
Patient 02-05	43	Male	20/04/2017-30/04/2017	2017AA04A200
Patient 02-06	41	Female	21/04/2017-10/05/2017	2017AA04A210
Patient 02-07	52	Male	04/05/2017-30/05/2017	2017AA04A050
Patient 02-08	39	Male	28/05/2017-11/06/2017	2017AA05A280
Patient 02-09	28	Female	30/05/2017-01/07/2017	2017AA05A300
Patient 02-10	50	Male	11/06/2017-22/06/2017	2017AA06A110
Patient 02-11	32	Male	25/06/2017-04/07/2017	2017AA06A250
Patient 02-12	16	Female	13/07/2017-29/07/2017	2017AA07A130
Patient 02-13	38	Male	15/07/2017-03/08/2017	2017AA07A150
Patient 02-14	41	Male	21/08/2017-12/09/2017	2017AA08A210
Patient 02-15	57	Male	17/09/2017-30/09/2017	2017AA09A170
Patient 02-16	46	Male	24/09/2017-12/10/2017	2017AA09A240
Patient 02-17	19	Male	11/10/2017-28/10/2017	2017AA10A110
Patient 02-18	29	Female	20/11/2017-24/12/2017	2017AA11A200
Patient 02-19	58	Male	12/12/2017-27/12/2017	2017AA12A120
Patient 02-20	55	Male	06/01/2018-23/01/2018	2018AA01A060
Patient 02-21	47	Female	18/01/2018-07/02/2018	2018AA01A180