# Overexpression of DCF1 inhibits glioma through destruction of mitochondria and activation of apoptosis pathway

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Supplementary information

Figure legends

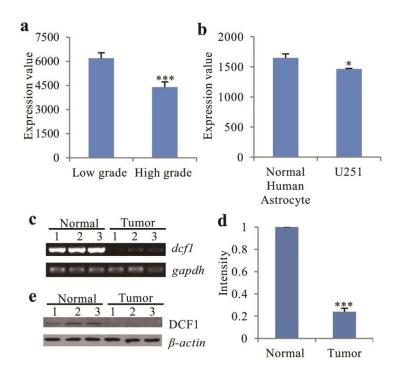
Sup. 1.DCF1 is down-regulated in gliomas. **a**.Compare DCF1 expression level in low-grade and high grade astrocytoma from gene array GDS2853. **b**,Expression value of DCF1 between normal human astrocytes and U251 glioma cell lines. **c**, Semi-quantitative RT-PCR analysis of DCF1 in normal brain tissue and transplantation tumor of athymic nude mice. **d**,Intensity analysis of DCF1 in Semi-quantitative RT-PCR. **e**,Western analysis of DCF1 in normal brain tissue and transplantation tumor of athymic nude mice. .(n=3 per group,\*P<0.05,\*\*P<0.01,\*\*\*P<0.001)

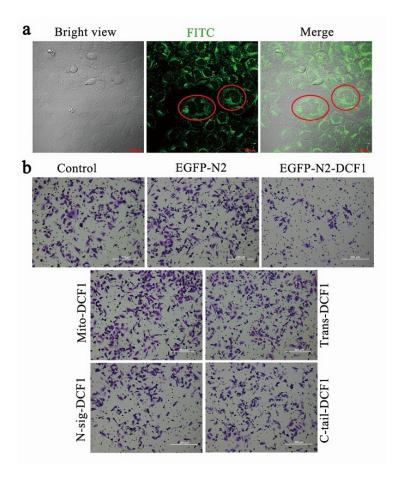
Fig. Sup. 2. **a,**Endogenous TMEM59 was detected in permeabilized HeLa cells with the DCF1 polyclonal antibody(green).**b,**Image of DCF1 and four mutants funtion on U251 cell lines invasion ability.

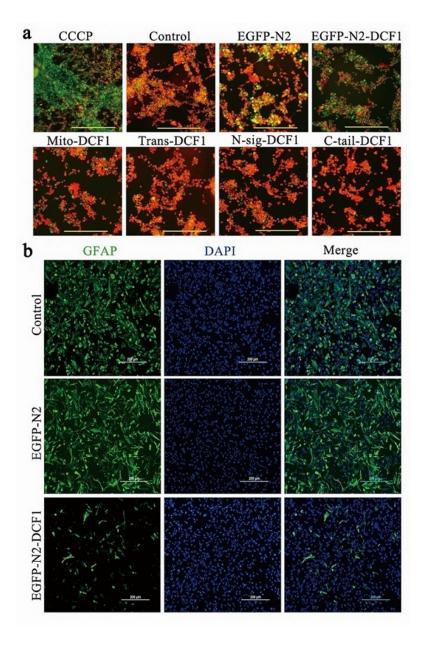
Fig. Sup. 3. **a**. Full length DCF1 induced the depolarization of mitochondria membrane potential in U87-MG glioma cell lines,but none of either mutant. **b**.Identification of glioma cell content by GFAP immunofluorescence in primary glioma cell isolated from planted tumors of three groups

Fig. Sup. 4. Possible mode of cell apoptosis mechanism induced by DCF1.

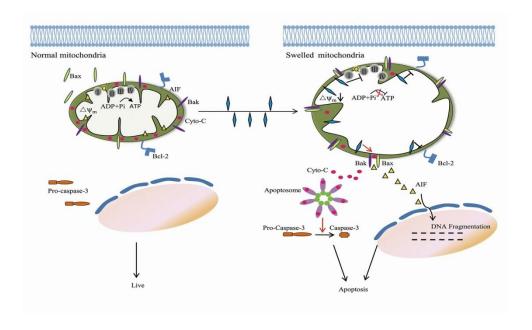
Sup. 1





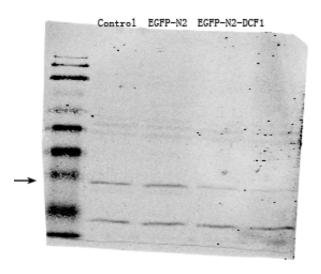


#### Sup.4

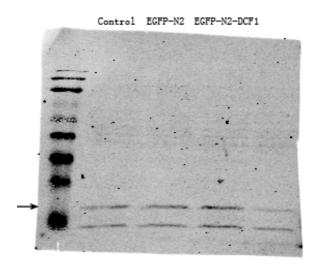


# The full-length blots in Fig.4 a

## Bcl2:



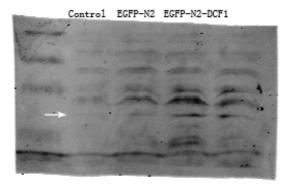
#### Bax:



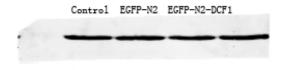
## Procaspase-3



Caspase 3



## β-actin



The full-length blots in Fig.5 B

