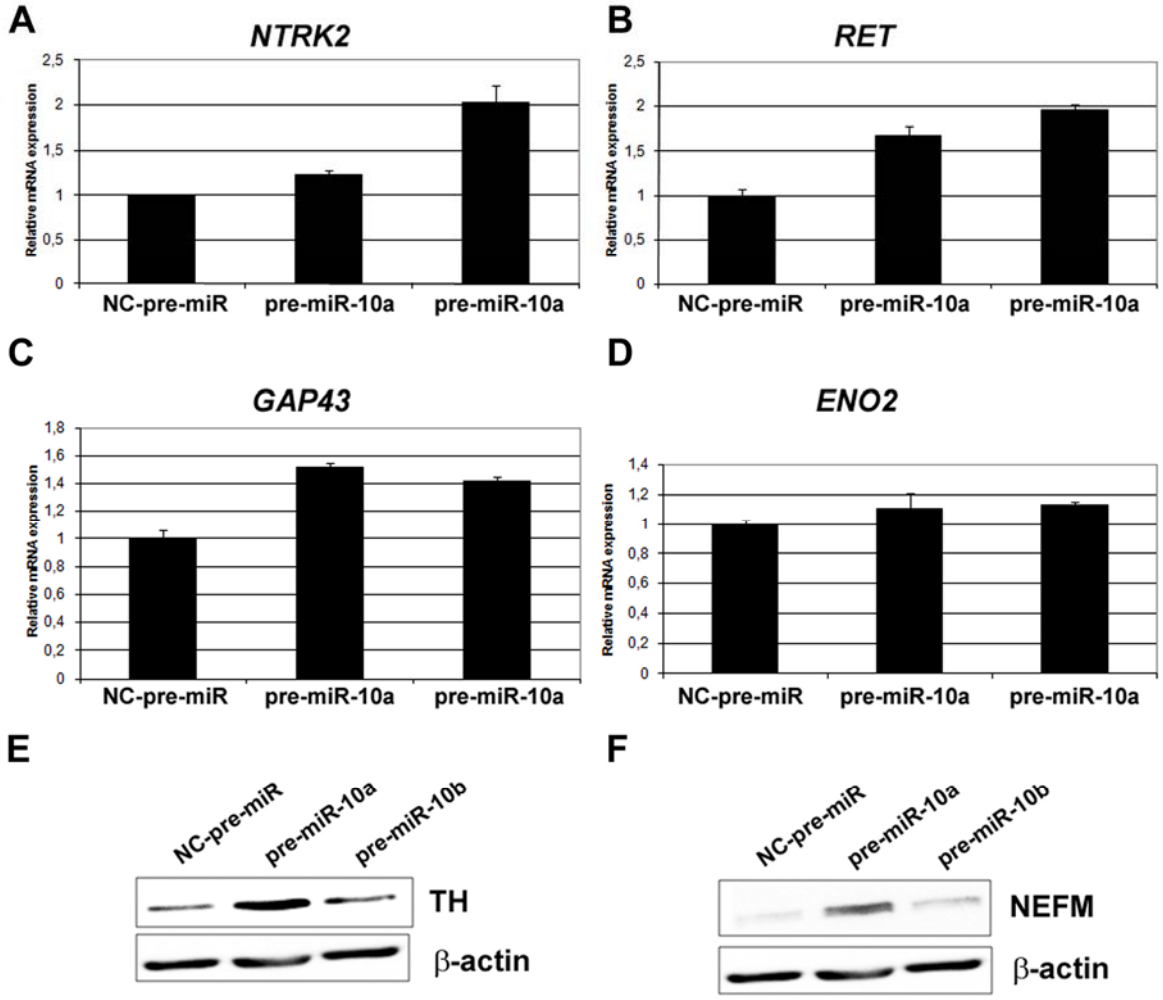

Suppl. Figure S1

Supplementary Figure S1. Effect of miR-10a and -10b overexpression on the expression of neural differentiation markers. (A-D) RT-qPCR analysis of the mRNA levels for *NTRK2* (A), *RET* (B), *GAP43* (C) and *ENO2* (D) after transfection of pre-miR-10a and -10b as indicated. The graph shows expression levels relative to that of cells transfected with NC-pre-miR (mean ± SD of a triplicate experiment). **(E and F).** Western blot of Tyrosine Hydroxylase (TH, E) and neurofilament NEFM protein (F) expression after pre-miR-10a, -10b and NC-pre-miR transfection of SH-SY5Y cells. The blot was reprobed with actin beta antibodies as loading control.

SFRS1 3’UTR

```
       uuaa   ga
   3’-GUGU  GCCUAUGUCCCAU 5’
      :|||  :||:|||||||||:          hsa-miR-10a
TTGGTGTACATGTGGGTACAGGGTGT  1769  Homo sapiens SFRS1
TTGGTGTACATGTGGGTACAGGGTGT  1689  Pan troglodytes (chimp)
TTGGTGTACATGTGGGTACAGGGTGT  1670  Pongo abellii (orangutan)
TTGGTGTACATGTGGGTACAGGGTGT  1391  Macaca mulatta (macaque)
TTGGTGTACATGTGGGTAGAGGGTGT  1778  Callithrix jacchus(marmoset)
TTGGTGTACATGTGGGTACAGGGTGT  1768  Equus caballus (horse)
TTGGTGTACATGTGGGTACAGGGTGT  1648  Bos taurus (cow)
TTGGTGTACATGTGGGTACAGGGTGT  1737  Canis familiaris (dog)
TTGGTGTACTTGTGGGTACAGGGTGT  1654  Sus scrofa (pig)
TTGGTGTACATGTGGGTACAGGGTGT  2514  Rattus norvegicus (rat)
TTGGTGTACATGTGGGTACAGGGTGT  1914   Mus musculus (mouse)
```

```
       uuaa aag
   3’-GUGU  GCC AUGUCCCAU 5’
      :|||  :|| |||||||||:          hsa-miR-10b
TTGGTGTACATGTGGGTACAGGGTGT  1769  Homo sapiens SFRS1
TTGGTGTACATGTGGGTACAGGGTGT  1689  Pan troglodytes (chimp)
TTGGTGTACATGTGGGTACAGGGTGT  1670  Pongo abellii (orangutan)
TTGGTGTACATGTGGGTACAGGGTGT  1391  Macaca mulatta (macaque)
TTGGTGTACATGTGGGTAGAGGGTGT  1778  Callithrix jacchus (marmoset)
TTGGTGTACATGTGGGTACAGGGTGT  1768  Equus caballus (horse)
TTGGTGTACATGTGGGTACAGGGTGT  1648  Bos taurus (cow)
TTGGTGTACATGTGGGTACAGGGTGT  1737  Canis familiaris (dog)
TTGGTGTACTTGTGGGTACAGGGTGT  1654  Sus scrofa (pig)
TTGGTGTACATGTGGGTACAGGGTGT  2514  Rattus norvegicus (rat)
TTGGTGTACATGTGGGTACAGGGTGT  1914  Mus musculus (mouse)
```

Supplementary Figure S2. Conservation of miR-10a and -10b target sequences in the 3’UTR region of SFRS1 mRNA in mammals

SFRS10 3’UTR

```
     uuuaag   u
3’GUG      CC    AGAUG       UCCCAU-5’
  :||      ||    |||||       ||||||        hsa-miR-10a
TTCATTAAAAGGTTTTTCTACTGAATCCAGGGTAT  1461 Homo sapiens  SFRS10(human)
TTCATTAAAAGGTTTTTCTACTGAATCCAGGGTAT  1353 Pan troglodytes (chimp)
TTCATTAAAAGGTTTTTCTACTGAATCCAGGGTAT  1412 Pongo abelii (orangutan)
TTCATTAAAAGGTTTTTCTACTGAATCCAGGGTAT  1353 Macaca mulatta (macaque)
TTCATTAAAAGGTTTTTCTACTGAATCCAGGGTA   1254 Callithrix jacchus (marm.)
TTCATTAAAAGGTTTTTCTACTGAATCCAGGGTAT  1444 Equus caballus (horse)
TTCATTAAATGGTTTTTCTACTGAATCCAGGGTAT  1326 Bos taurus (cow)
TTCATTAAAAGGTTTTTCTACTGAATCCAGGGTAT  1740 Canis familiaris (dog)
TTCATTAAAAGGTTTTTCTACTGAATCCAGGGTAT  1130 Oryctolagus cuniculus(rab.)
TTCATTAAAAGGTTTTTCTACTGAATCCAGGGTAT  1326 Rattus norvegicus (rat)
TTCATTAAAAGGTTTTTCTACTGAATCCAGGGTAT  1344 Mus musculus (mouse)
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     uuuaag
3’GUG      CCA   AGAUG       UCCCAU-5’
  |||      |||   |||||       ||||||        hsa-miR-10b
TTCATTAAAAGGTTTTTCTACTGAATCCAGGGTAT  1461 Homo sapiens SFRS10(human)
TTCATTAAAAGGTTTTTCTACTGAATCCAGGGTAT  1353 Pan troglodytes (chimp)
TTCATTAAAAGGTTTTTCTACTGAATCCAGGGTAT  1412 Pongo abelii (orangutan)
TTCATTAAAAGGTTTTTCTACTGAATCCAGGGTAT  1353 Macaca mulatta (macaque)
TTCATTAAAAGGTTTTTCTACTGAATCCAGGGTA   1254 Callithrix jacchus(marm.)
TTCATTAAAAGGTTTTTCTACTGAATCCAGGGTAT  1444 Equus caballus (horse)
TTCATTAAATGGTTTTTCTACTGAATCCAGGGTAT  1326 Bos taurus (cow)
TTCATTAAAAGGTTTTTCTACTGAATCCAGGGTAT  1740 Canis familiaris (dog)
TTCATTAAAAGGTTTTTCTACTGAATCCAGGGTAT  1130 Oryctolagus cuniculus(rab.)
TTCATTAAAAGGTTTTTCTACTGAATCCAGGGTAT  1326 Rattus norvegicus (rat)
TTCATTAAAAGGTTTTTCTACTGAATCCAGGGTAT  1344 Mus musculus (mouse)
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Supplementary Figure S3. Conservation of miR-10a and -10b target sequences in the 3’UTR region of SFRS10 mRNA in mammals