Supplementary Table S1

Gene	Forward Primer 5' to 3'	Reverse primer 5' to 3'
Serpine-1	GCCAGATTTATCATCAATGACTGGG	GGAGAGGTGCACATCTTTCTCAAAG
Col1α1	AATGGCACGGCTGTGTGCGA	AGCACTCGCCCTCCCGTCTT
α-SMA	GCCAGTCGCTGTCAGGAACCC	AGCCCAGAGCCATTGTCGCA
TGF-β	GACAGCCCTGCTCACCGTCG	CCCGAGGGCTGGTCGGGAAT
Hif1-α	ACCTTCATCGGAAACTCCAAAG	CTGTTAGGCTGGGAAAAGTTAGG
Tfrc	TCATGAGGGAAATCAATGATCGTA	GCCCCAGAAGATATGTCGG
Slc40a1	TTGCAGGAGTCATTGCTGCTA	TGGAGTTCTGCACACCATTGAT
s9	AGCCGGCCTAGCGAGGTCAA	CGAAGGGTCTCCGTGGGGTCA

Supplementary Table S1: Primers for gene expression analysis

Primers for qRT-PCR analysis of fibrogenic and iron-related genes of interest are listed.

Supplementary Table S2

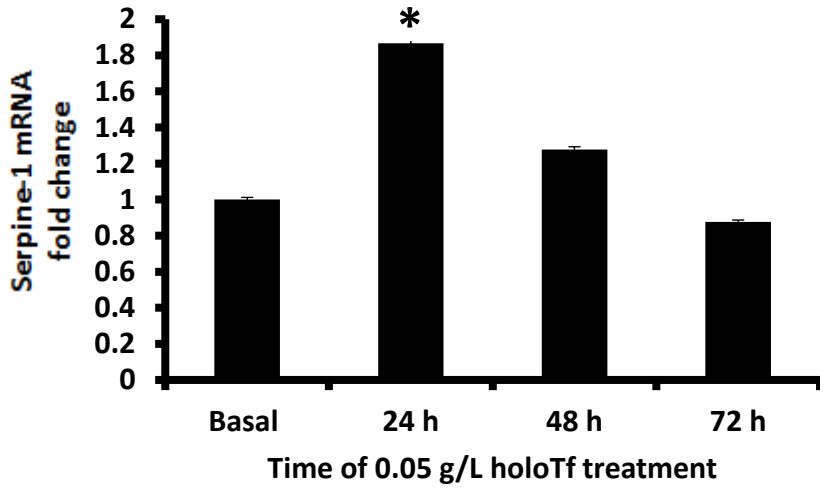
Protein	Primary antibody	Secondary antibody
TGF-β R II	Anti- TGF-β R II antibody (C-16): sc-220, rabbit polyclonal (Santa Cruz Biotechnology).	Anti-rabbit HRP conjugate 7074 P2 (Cell Signaling Technology)
phospho-Smad-2	Anti-Smad2 Antibody, phospho-specific (Ser465/467), AB3849, rabbit polyclonal (Abcam).	
Actin	AB75186, anti beta-actin loading control, rabbit polyclonal (Abcam).	
TfR1	Anti- transferrin receptor-1 antibody, AB84036. (Abcam).	
Vimentin	Anti-vimentin antibody, M7020, mouse monoclonal (Dako).	Anti-mouse HRP conjugate 7076 (Cell Signaling Technology)

Supplementary Table S2: Antibodies for western blot

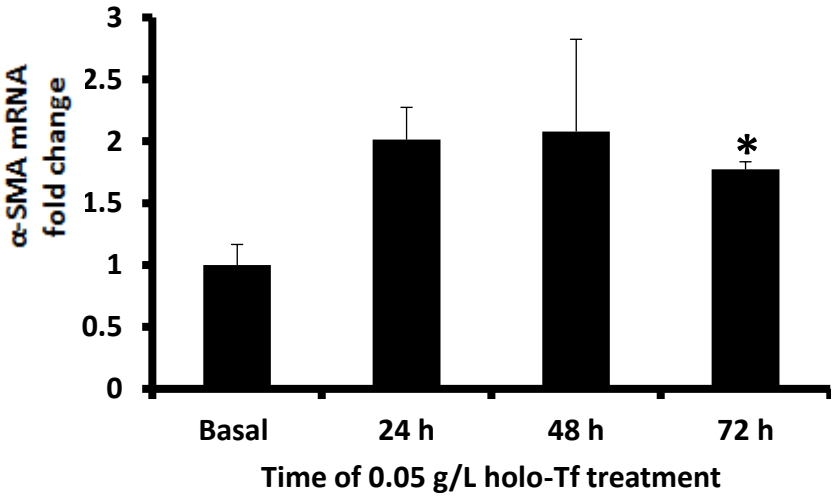
Primary antibodies and the corresponding HRP- conjugated secondary antibodies used in the western blots are listed.

Supplementary Fig.1

(a)



(b)

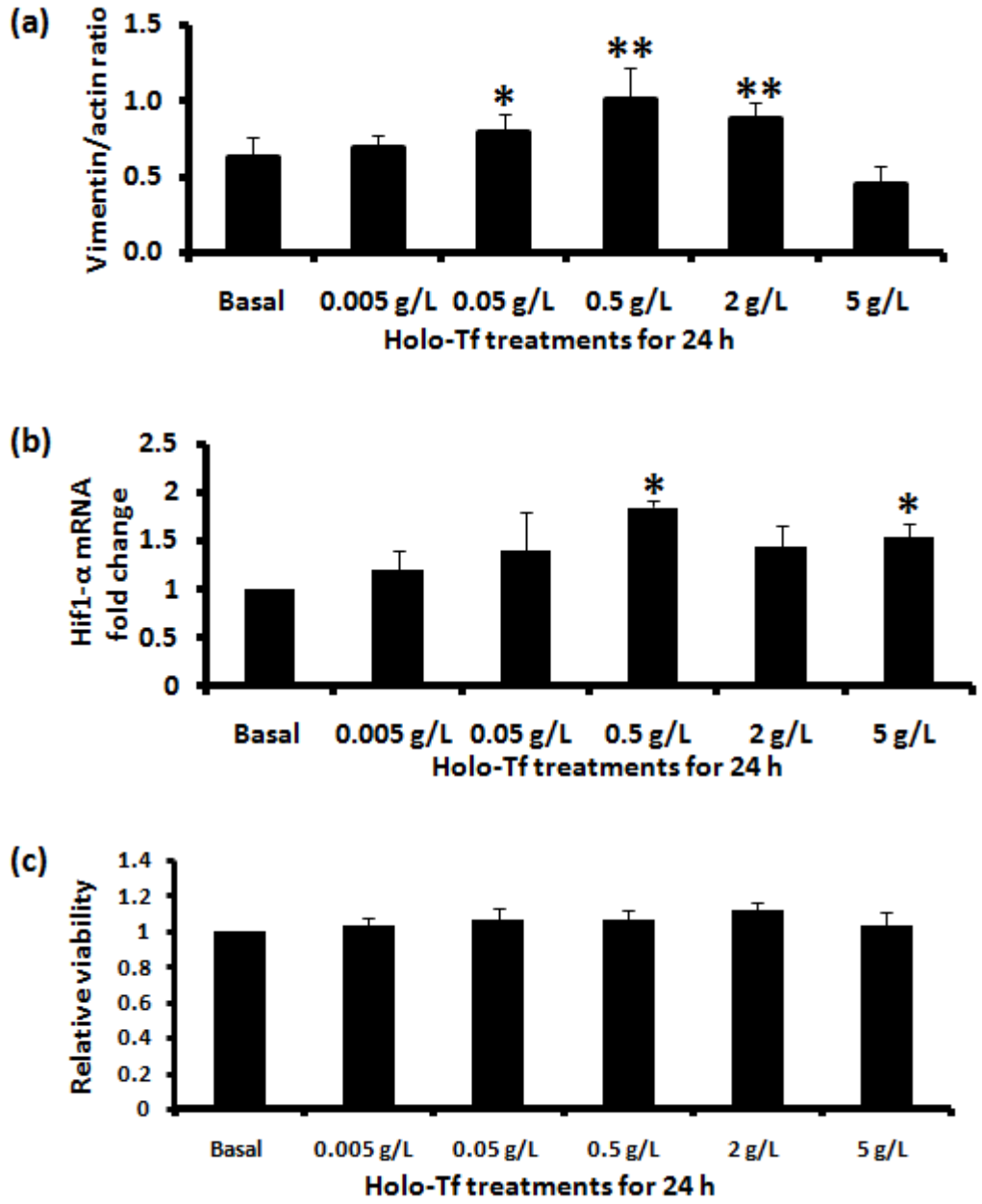


Supplementary Fig.1 Holo-Tf enhances HSC activation

The qRT-PCR detection of (a) Serpine-1 mRNA and (b) α-SMA mRNA are shown.

Data is presented as mean ± SD. *p<=0.05 compared to basal conditions.

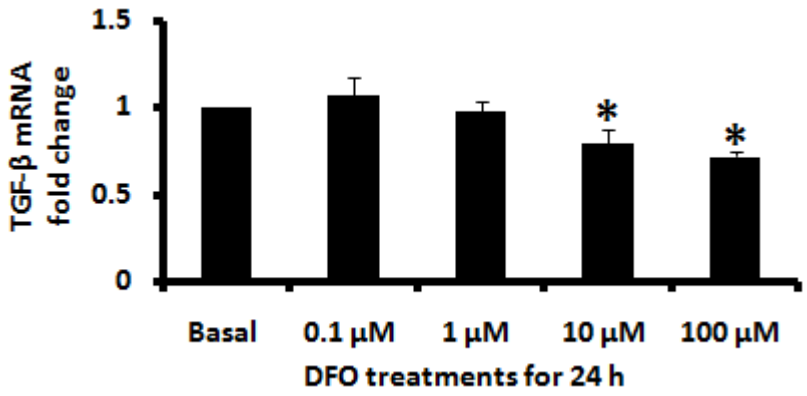
Supplementary Fig.2



Supplementary Fig.2 Effect of holo-Tf on vimentin, Hif1-α mRNA and viability

(a) Density of vimentin protein bands, as analysed by the Image-J software following the detection by western blot. (b) qRT-PCR detection of Hif1-α mRNA and (c) cell viability following the treatments. Data is presented as mean ± SD. *$p<0.05$ and **$p<0.01$ compared to basal conditions.

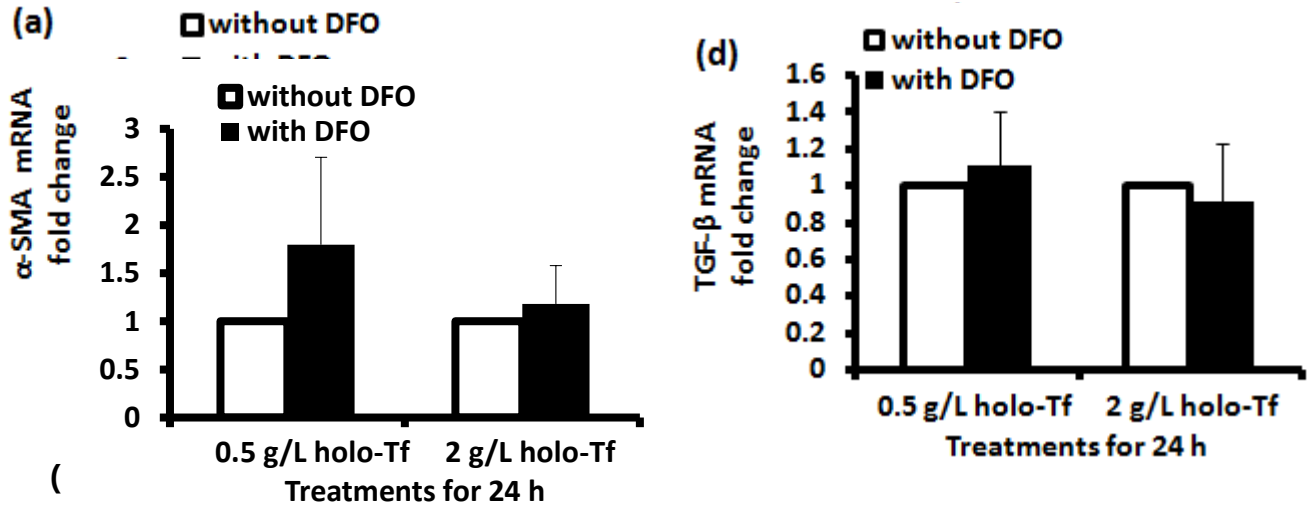
Supplementary Fig.3

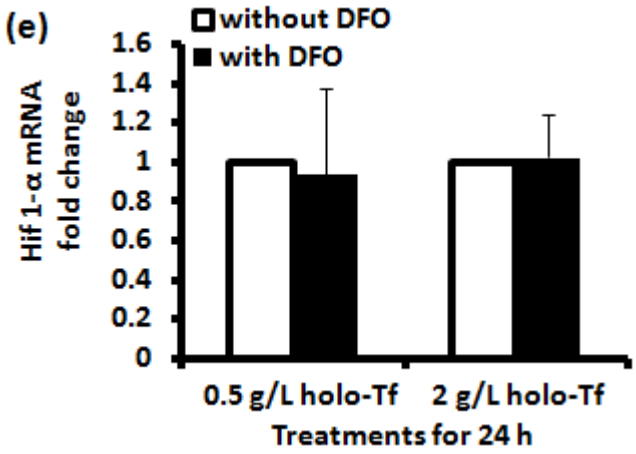


Supplementary Fig.3 Iron-chelation down-regulated *TGF-β* expression

Following treatments with a gradient of DFO concentrations, significant reduction in TGF-β mRNA was observed. Data is presented as mean ± SD. *p<0.05 compared to basal conditions.

Supplementary Fig.4

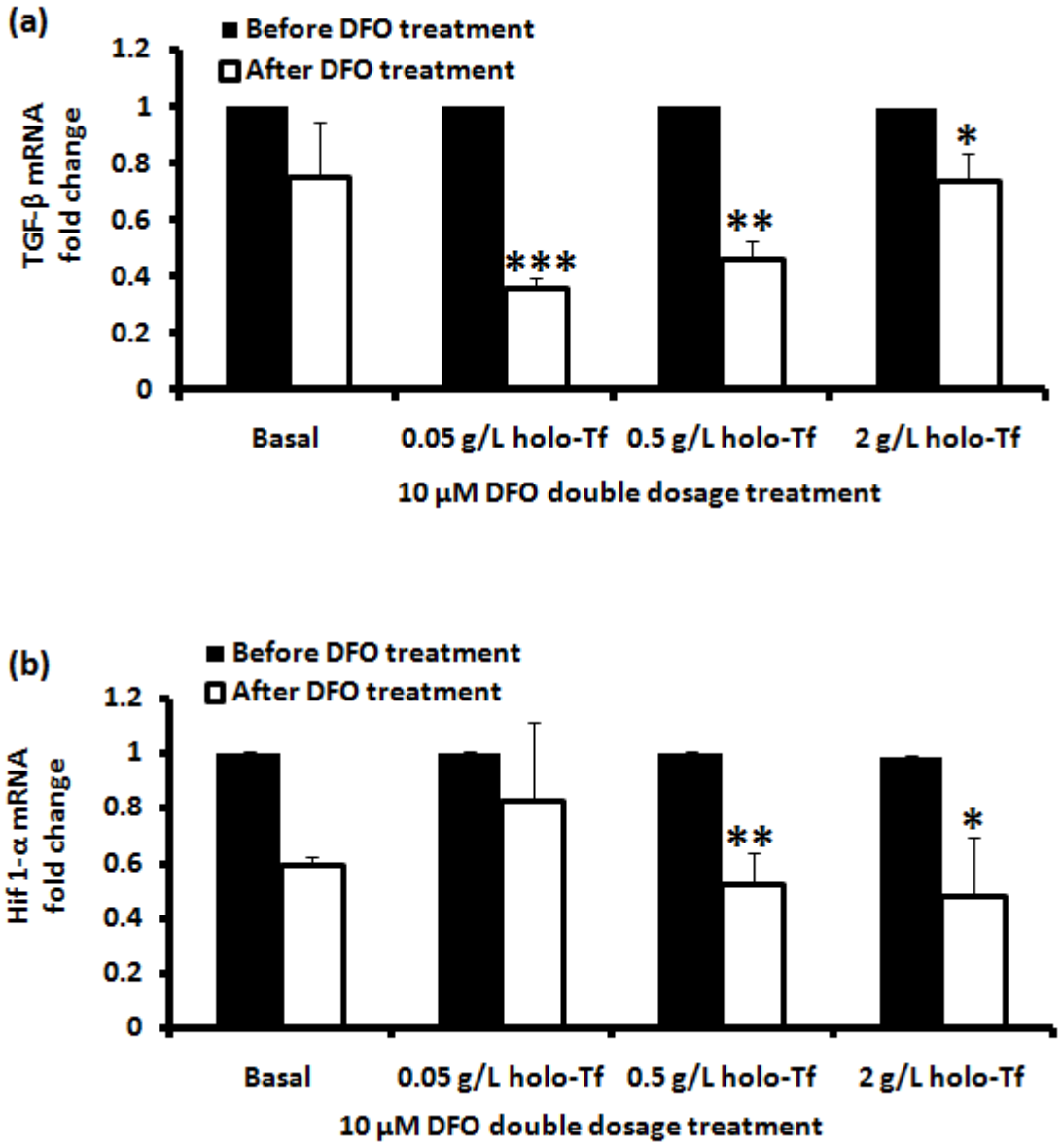




Supplementary Fig.4 Combined effect of holo-Tf and DFO on fibrogenic gene expression

The mRNA expression of (a) *serpine-1* (b) *Col1-α1* (c), *α-SMA* (d), *TGF-β* and (e) *Hif1-α* were studied following treatment with 10 μM DFO and 0.05 g/L or 2 g/L holo-Tf for 24 h. Data is presented as mean ± SD.

Supplementary Fig.5



Supplementary Fig.5 Iron chelation attenuated the iron-induced expressions of *TGF-β* and *Hif1-α*

The qRT-PCR detection of (a) TGF-β mRNA and (b) Hif1-α mRNA following the

DFO double dosage treatment (explained in Methods). Data is presented as mean ± SD. *p<=0.05, **p<0.03 and ***p<0.01compared to basal conditions.