Table 1

Reduced SMC proliferation in the presence of Fe(II)

Incubation time[a]	Cell proliferation[b] (% of control)	DNA synthesis[c] (% of control)
12 h	64	20
24 h	65	30

a) Cells were cultivated for the time indicated in the presence and absence (control) of 30 µg /ml Fe(II)-gluconate, respectively. b) The cell proliferation rate was determined by a WST-assay. The activity is given relative to the control culture without Fe(II) addition. c) The DNA synthetic rate was determined by a BrdU-incorporation assay.

Table 2

Specificity of the cellular response to excess Fe(II)

Gene	Fold-change[a]	
	12	24
Transferrin Rezeptor CD71	0.15	0.18
Ferritin, light polypeptide	1.1	1.8
Ferritin, heavy polypeptide 1	1.1	2.3
Transferrin	3.7	0.6
Ceruloplasmin	1.3	1.2

[a] Signal intensity obtained from the Fe(II) treated culture relative to the control culture.

Table 3.

The most significant down regulated biological process categories

Category	EASE score[a]	Genes[b]
mitotic cell cycle	3,88E-26	46
cell proliferation	3,22E-23	72
cell cycle	2,74E-21	57
DNA replication and chromosome cycle	1,75E-16	28
cell growth and/or maintenance	1,80E-12	119
DNA replication	4,52E-12	21
S phase of mitotic cell cycle	5,69E-12	21
mitosis	1,79E-11	19
M phase of mitotic cell cycle	2,30E-11	19
nuclear division	1,22E-10	20
M phase	2,43E-10	20

[a] Ease Probability score. E: Exponent, power of 10

[b] Number of regulated genes within each category

Table 4

The most significant up regulated biological process categories

Category	EASE score[a]	Genes
sterol biosynthesis	2,61E-07	8
sterol metabolism	5,35E-07	10
steroid biosynthesis	6,98E-06	9
lipid metabolism	1,64E-05	23
oxidoreductase activity	2,59E-05	24
carboxylic acid metabolism	3,69E-05	20
alcohol metabolism	5,63E-05	14
organic acid metabolism	3,92E-05	20
lipid biosynthesis	7,90E-05	12

[a] Details see Table 3.