

Supplementary information

Supplementary Table 1 |ON-TARGETplus SMART pool small interfering RNAs used in this study. This technology is based on the use of four duplex siRNAs targeting four different regions of the mRNA to be targeted (SMARTpool). This technology is also based on dual-strand modification (ON-TARGETplus) proven to reduce off target effects caused by both strands.

ON-TARGET plus SMARTpools siRNAs	Companies
<i>Casp3</i> (mouse, <i>Casp3</i> NM_009810) CGCACAAGCUAGAAUUUAU GGAUAGUGUUUCUAAGGAA CAACGGAUUCGAGUCCUU GAAAUUGGCAUAUGCAUAA	Dharmacon (L-043042)
<i>Trx1</i> (mouse, <i>Txn1</i> NM_011660) CCAACUGCCAUCUGAUUAU GGAUGUUGCUGCAGACUGU CGUUUAUUCGGUUACAUA UCAAUUGCAUGCCGACCUU	Dharmacon (L-062799)
<i>Trx2</i> (mouse, <i>Txn2</i> NM_019913) GUACAAUGCUGGUGGUUA AAGGAAACCAGAAGCCGAA CAAAGUGGACAUUGACGAU UCGCCAAGCAGCACGGGAA	Dharmacon (L-063174)
<i>Nos2</i> (mouse, <i>Nos2</i> NM_010927) GAUUUAGAGUCUUGGUGAA GGAGAUGGUCCGCAAGAGA CAUGGGAGCCACAGCAUA GAAACGUUAUCAUGAAGAU	Dharmacon (L-042006)
<i>Nos2</i> (rat, <i>Nos2</i> NM_012611) CCUGCAGGCUCACGGUCAA GAUGAAAGAACUCGGGCAU GUACAUGGGCACCGAGAUU UCAAGAGCCAGAAACGUUA	Dharmacon (L-100708)
Non-targeting siRNA #1 UGGUUUACAUGUCGACUAA Negative control siRNA with at least 4 mismatches to any human, mouse, or rat gene. Microarray tested.	Dharmacon (D-001810)

Supplementary Table 2 | shRNA constructs used in this study.

shRNA constructs in retroviral RFP vector	Companies
Nos2 (Mouse; Nos2 NM_010927) TF512302A(FI575114) GAGTTCATCAACCAGTATTATGGCTCCTT TF512302B(FI575115) GTTGAACATATGTCCTATCTCCATTCTACT TF512302C(FI575116) CTTGGAAGAGGAGCAACTACTGCTGGTGG TF512302D(FI575117) ACTTGAGCGAGGAGCAGGTGGAAGACTAT Scrambled negative control GCACTACCAGAGCTAACTCAGATAGTACT	Origene technologies (TF512302)

Supplementary Table 3 | Antibodies.

When available, reference number to 1DegreeBio antibody validation profile is indicated under named antibody. According to supplier, the used NOS2 antibody retrieves 130 citations in PubMed. Validation of the SNO-Cys antibody is described in detail on the supplier website.

Primary Antibodies	Companies	Dilution used
β-actin (AC40; mouse mAb) <i>1DB-001-0000310966</i>	Sigma Aldrich (A-3853)	1:3000
cleaved caspase-3(Asp175) (5A1E; rabbit mAb) <i>1DB-001-0000861372</i>	Cell Signaling (#9664)	1:100
procaspase-3 (rabbit pAb) <i>1DB-001-0000809677</i>	Cell Signaling (#9662)	1:1000
GAPDH (rabbit pAb) <i>1DB-001-0000202582</i>	Trevigen (#2275)	1:3000
Human nuclei (235-1; mouse mAb) <i>1DB-001-0000883480</i>	Millipore (MAB1281)	1:500
Iba1 (goat pAb) <i>1DB-001-0001134700</i>	Abcam (ab107159)	1:500
NOS2 (M19; rabbit pAB) <i>130 citations in PubMed</i>	Santa Cruz Biotech(sc-650)	1:1000
Nitroso-cysteine (SNO-Cys) (mouse mAB) www.agscientific.com/ Selected references PMID: 15199244; 16648260; 18094238; 18394602; 22366318; 23748109.	AG Scientific (N-1078)	1:1000
Thioredoxin-1 (C63C6; rabbit mAB) <i>1DB-001-0001086445</i>	Cell Signaling (#2429)	1:1000
Thioredoxin-2 (rabbit pAB) <i>1DB-001-0001052054</i>	Proteintech (13089-1-AP)	1:500
VDAC (D73D12; rabbit mAB) <i>1DB-001-0001052054</i>	Cell Signaling (#4661)	1:1000
Normal Rabbit IgG Control	R&D Systems (#AB-105-C)	

Supplementary Table 4 | Primer sequences, T_m and product size.

All sequences are given 5' to 3'.

cDNA (organism)	Forward Primer	Reverse Primer	T _m	Amplicon
Actb (mouse)	ttgctgacaggatgcagaag	tgatccacatctgctggaag	58.2/57.3	147 bp
Casp3 (mouse)	caacggaattcgagtccttc	cagttcttttcgtgagcatgg	56.6/57.1	89 bp
Casp8 (mouse)	tctatggaacggatgggaag	aagggcactttgaaccagtg	56.4/58.6	72 bp
Ccl22 (mouse)	ctgatgcagggtccctatggt	gcaggatTTTgaggTccaga	58.9/57.5	116 bp
Ii6 (mouse)	ggaccaagaccatccaattc	ggcataacgcactaggTTTg	56.1/57.2	91 bp
Mmp14 (mouse)	tccggataagTTTgggactg	cattatgctgccacttgagg	56.9/56.8	83 bp
Nos2 (mouse)	gtggtgacaagcacatttgg	aaggccaaacacagcatacc	57.9/58.7	117 bp
Chil3 (mouse)	cagggtaatgagtgggttgg	cacggcacctcctaaattgt	57.9/58.2	90 bp
Actb (rat)	aagtcctcaccctcccaaaag	aagcaatgctgtcaccttccc	61.9/61.2	98 bp
Nos2 (rat)	cagccctcagagtacaacgat	cagcaggcacacgcaatgat	59.5/61.9	91 bp