

## Supplementary Information's

**Fig S1:** PRDX1 gene coding sequence, Prdx1 protein sequence and the location of gRNAs in Exon1 of PRDX1, related to Step 1a.

### PRDX1 Gene coding sequence

ATGTCCTTCAGGAAATGCTAAAATTGGGCACCCTGCCCCCAACTTCAAAGCCACAG  
CTGTTATGCCAGATGGTCAGTTTAAAGATATCAGCCTGTCTGACTACAAAGGAAA  
ATATGTTGTGTTCTTCTTTTACCCTCTTGACTTCACCTTTGTGTGCCCCACGGAGA  
TCATTGCTTTCAGTGATAGGGCAGAAGAATTTAAGAACTCAACTGCCAAGTGAT  
TGGTGCTTCTGTGGATTCTCACTTCTGTCATCTAGCATGGGTCAATACACCTAAG  
AAACAAGGAGGACTGGGACCCATGAACATTCCTTTGGTATCAGACCCGAAGCGC  
ACCATTGCTCAGGATTATGGGGTCTTAAAGGCTGATGAAGGCATCTCGTTCAGGG  
GCCTTTTTATCATTGATGATAAGGGTATTCTTCGGCAGATCACTGTAAATGACCT  
CCCTGTTGGCCGCTCTGTGGATGAGACTTTGAGACTAGTTCAGGCCTTCCAGTTC  
ACTGACAAACATGGGGAAGTGTGCCCAGCTGGCTGGAAACCTGGCAGTGATACC  
ATCAAGCCTGATGTCCAAAAGAGCAAAGAATATTTCTCCAAGCAGAAGTGA

### Prdx1 protein sequence

MSSGNAKIGH PAPNFKATA VMPDGQFKDISLSDYKGYVVFVFFYPLDFTFVCPTEIIA  
FSDRAEEFKLNCQVIGASVDSHFCHLAWVNTPKKQGGGLGPMNIPLVSDPKRTIAQD  
YGVLKADEGISFRGLFIIDDKGILRQITVNDLPVGRSVDETLRLVQAFQFTDKHGEVC  
PAGWKPGSDTIKPDVQKSKEYFSKQK\*

### gRNA target location in exon 1 of PRDX1

