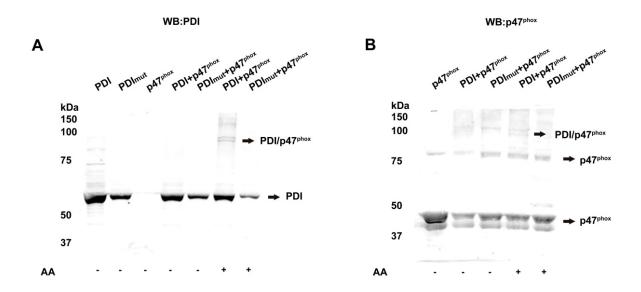
## SUPPLEMENTAL MATERIAL

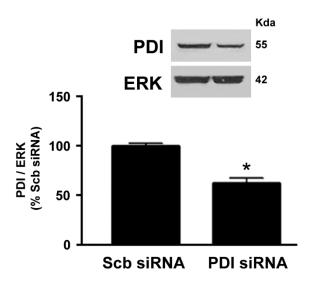
## Redox Activation of Nox1 Involves an Intermolecular Disulfide Bond between Protein Disulfide Isomerase and p47<sup>phox</sup> in Vascular Smooth Muscle Cells

Marcela Gimenez, Sidney Veríssimo-Filho, Ilka Wittig, Brandon Schickling, Fabian Hahner, Christoph Schürmann, Luis E.S. Netto, José César Rosa, Ralf P. Brandes, Simone Sartoretto, Lívia De Lucca Camargo, Fernando Abdulkader, Francis J. Miller and Lucia Rossetti Lopes.

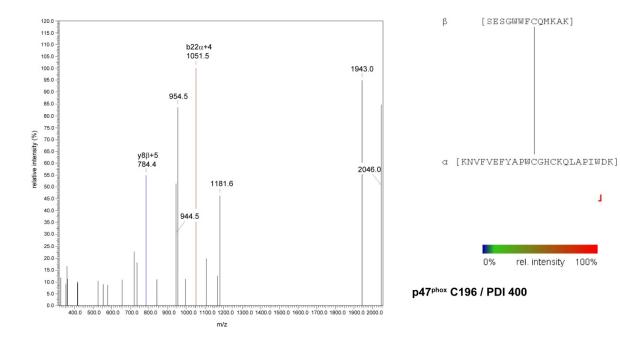
Supplemental Figures (7)



**Supplemental Figure I**. Representative western blotting analysis for in vitro association between recombinant PDI wt and PDI mut (A) with p47<sup>phox</sup> (B).



**Supplemental Figure II**. PDI protein expression in VSMCs transfected with PDI siRNA. PDI expression was normalized to ERK 1/2. Data are expressed as percentage of scrambled siRNA (Scb) and represent mean  $\pm$  SEM of n = 5 experiments. \*p<0.05 vs Scb.

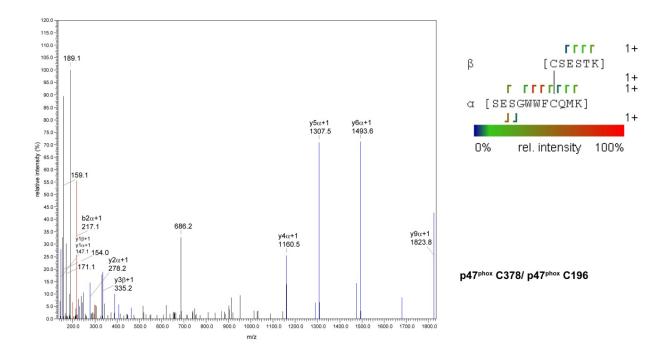


1+ 2+ 3+ 4+ 5+

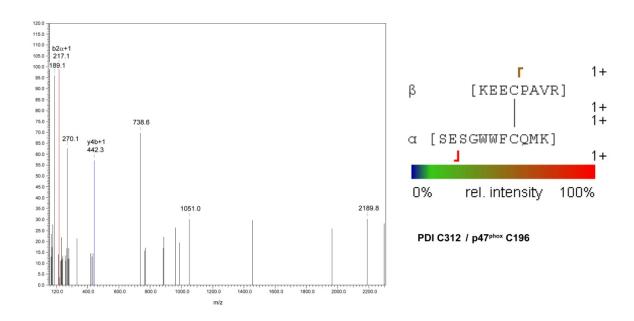
5+ 4+ 3+ 2+ 1+

100%

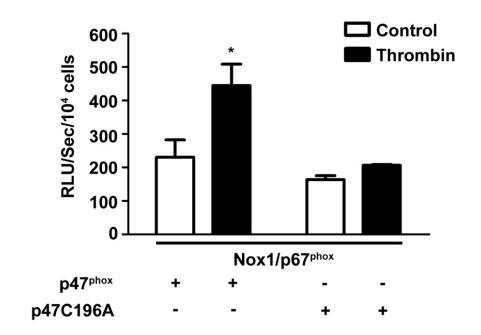
**Supplemental Figure III.** Mass spectrum obtained for the peptide SESGWWFCQMKAK-KNVFVEFYAPWCGHCKQLAPIWDK, corresponding to the intermolecular disulfide between Cys 196 of p47 and Cys 400 of PDI.



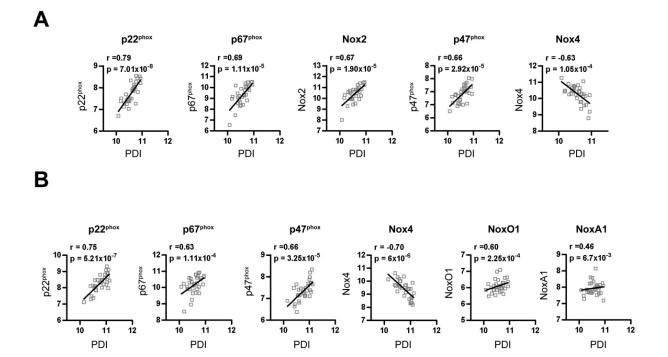
**Supplemental Figure IV.** Mass spectrum consistent with covalent adducts of CSESTK- SESGWWFCQMK peptide, corresponding to the intramolecular disulfide between Cys196 and Cys378 of p47<sup>phox</sup>.



**Supplemental Figure V.** Mass spectrum for the KEECPAVR-SESGWWFCQMK peptide, corresponding to the intermolecular disulfide between Cys 312 of PDI and Cys 196 of p47 phox.



**Supplemental Figure VI.** Lucigenin-enhanced chemiluminescence (5  $\mu$ M) in Cos p22<sup>phox</sup> cells (RLU, relative light units) transfected with p47<sup>phox</sup> WT or p47phoxC196A Data are expressed as mean  $\pm$  SEM of n=4. \* p<0.05 vs respective Control.



**Supplemental Figure VII.** Pearson correlation analysis of mRNA expression levels between PDI and NADPH oxidase isoforms or regulatory subunits obtained from 32 paired samples of human tissue retrieved from Gene Expression Omnibus (GEO, GSE43292). **A**. intact arteries. **B**. atheroma plaque.