

Short-Term Blockade of Pro-Inflammatory Alarmin S100A9 Favorably Modulates Left Ventricle Proteome and Related Signaling Pathways Involved in Post-Myocardial Infarction Recovery

Raluca Maria Boteanu ¹, Viorel-Iulian Suica ¹, Elena Uyy ¹, Luminita Ivan ¹, Aurel Cerveanu-Hogas ¹, Razvan Gheorghita Mares ², Maya Simionescu ¹, Alexandru Schiopu ^{2,3} and Felicia Antohe ^{1,*}

¹ Department of Proteomics, Institute of Cellular Biology and Pathology "N. Simionescu" of the Romanian Academy, 050568 Bucharest, Romania; raluca.haraba@icbp.ro (R.M.B.); viorel.suica@icbp.ro (V.-I.S.); elena.uyy@icbp.ro (E.U.); luminita.radulescu@icbp.ro (L.I.); aurel.cerveanu-hogas@icbp.ro (A.C.-H.); maya.simionescu@icbp.ro (M.S.)

² Department of Pathophysiology, University of Medicine, Pharmacy, Sciences and Technology of Targu Mures, 540142 Targu Mures, Romania; razvan.mares@umfst.ro (R.G.M.); alexandru.schiopu@med.lu.se (A.S.)

³ Department of Clinical Sciences Malmö, Lund University, 21428 Malmö, Sweden

* Correspondence: felicia.antophe@icbp.ro; Tel.: +40-213-192-737

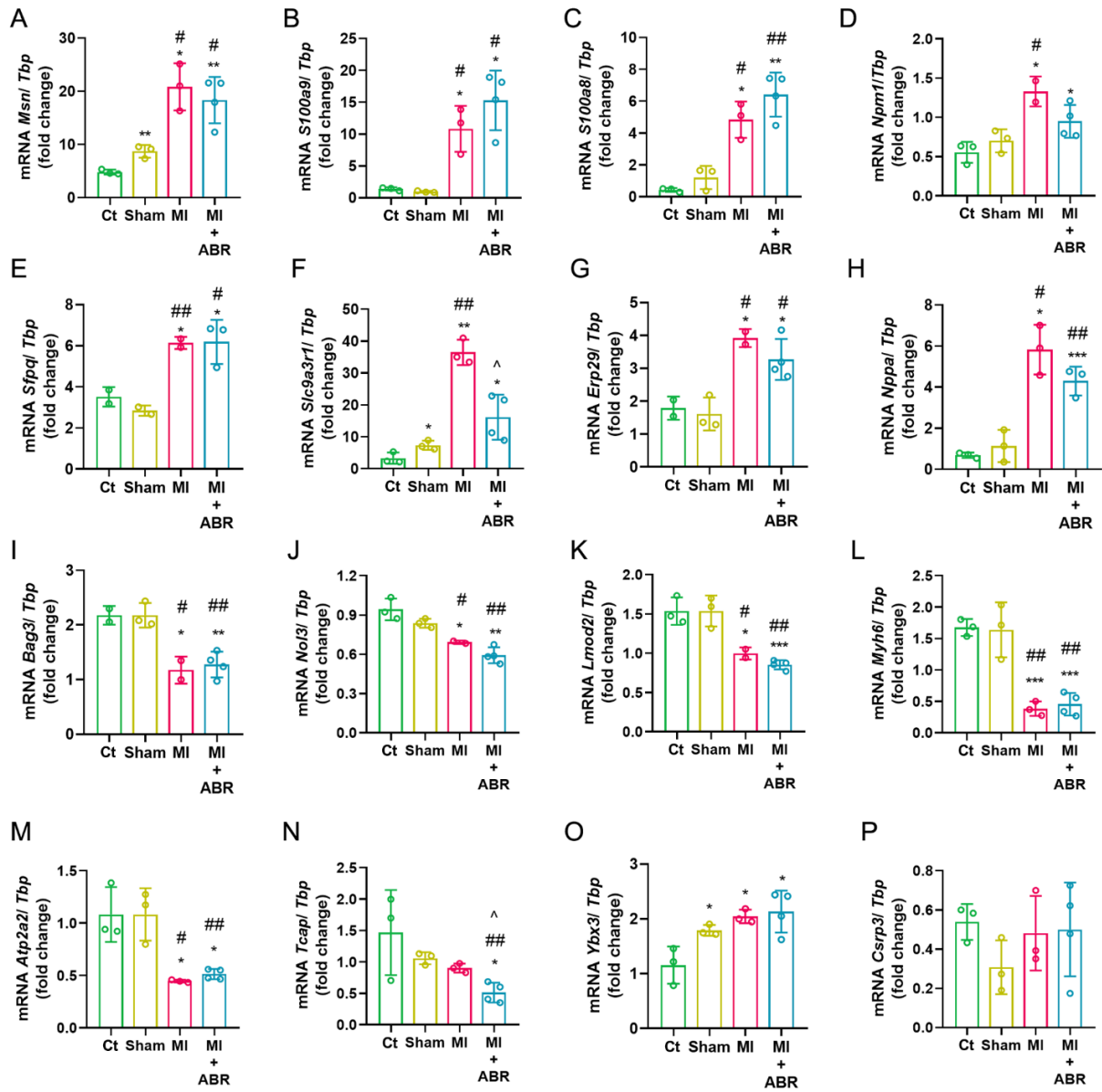


Figure S1. Gene expression profile of the identified differentially expressed proteins (DEPs) at 3 days post-MI mRNA expression levels of *Msn*, *S100a9*, *S100a8*, *Npm1*, *Sfpq*, *Slc9a3r1*, *Erp29*, *Nppa*, *Bag3*, *Nol3*, *Lmod2*, *Myh6*, *Atp2a2*, *Tcap*, *Ybx3* and *Csrp3* in the left ventricle of control Ct, Sham, MI and MI+ABR groups were quantified by real-time PCR, using *Tbp* as internal control (A–P). Data are presented as mean \pm SD; $p^* < 0.05$, $p^{**} < 0.01$, $p^{***} < 0.001$ vs. Ct; $p^\# < 0.05$, $p^{##} < 0.01$ vs. Sham; $p^\wedge < 0.05$ vs. MI; p -values were calculated using Student's t test.

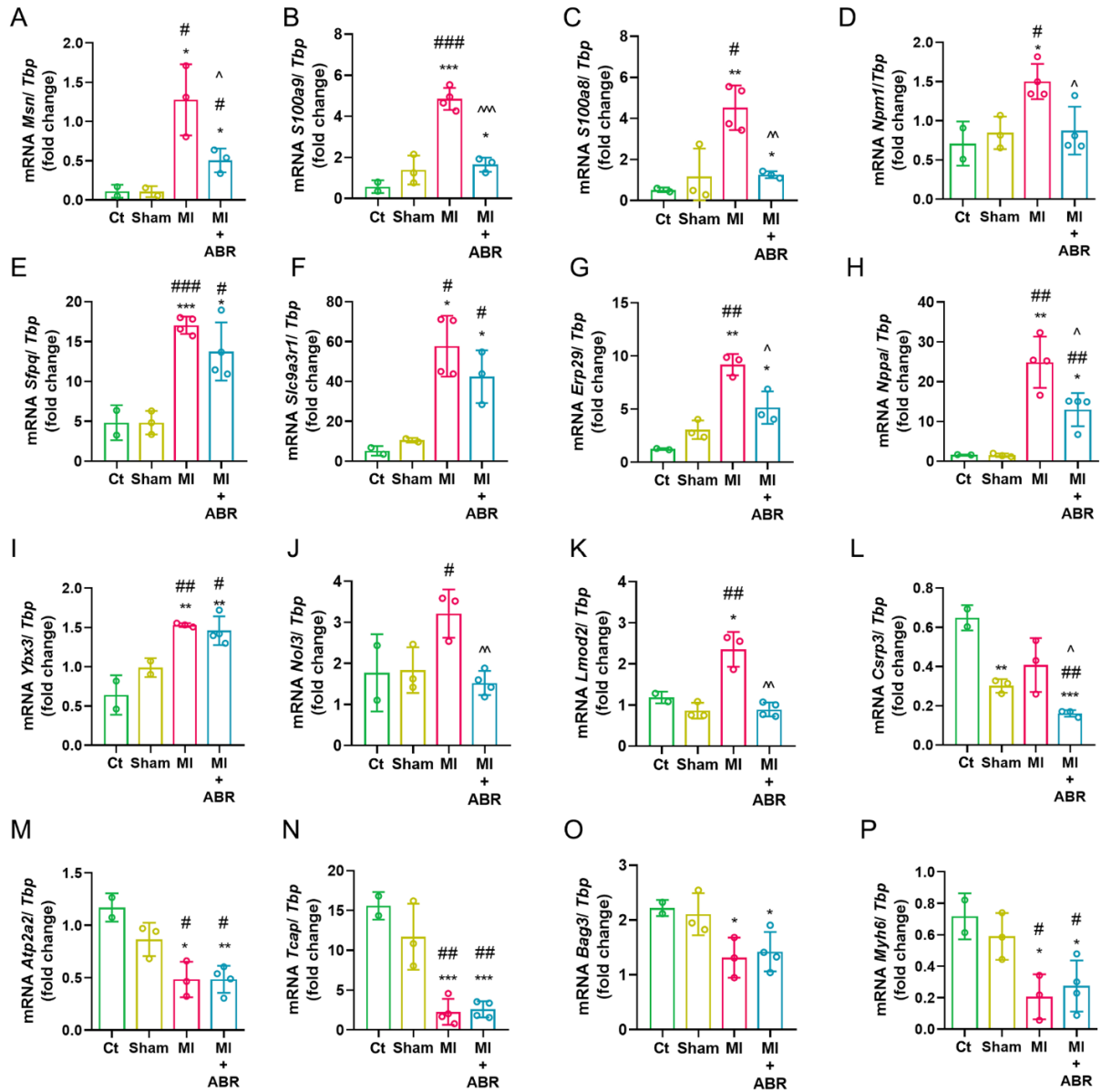


Figure S2. Gene expression profile of the identified DEPs at 7 days post-MI mRNA expression levels of *Msn*, *S100a9*, *S100a8*, *Npm1*, *Sfpq*, *Slc9a3r1*, *Erp29*, *Nppa*, *Ybx3*, *Nol3*, *Lmod2*, *Myh6*, *Atp2a2*, *Tcap*, *Bag3* and *Csrp3* in the LV of control Ct, Sham, MI and MI+ABR groups were quantified by real-time PCR, using *Tbp* as internal control (A–P). Data are presented as mean \pm SD; $p^* < 0.05$, $p^{**} < 0.01$, $p^{***} < 0.001$ vs Ct; $p^\# < 0.05$, $p^{\#\#} < 0.01$ vs. Sham; $p^\wedge < 0.05$, $p^{\wedge\wedge} < 0.01$, $p^{\wedge\wedge\wedge} < 0.001$ vs MI; p -values were calculated using Student's t test.