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Inhibition of homocysteine-induced endoplasmic reticulum stress and endothelial cell damage by L-SERINE AND GLYCINE

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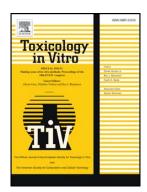
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## **ACCEPTED MANUSCRIPT**

Inhibition of homocysteine-induced endoplasmic reticulum stress and endothelial cell damage by L-serine and glycine

[Running Title: L-Serine Effects on Homocysteine-induced ER Stress]

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#### **Abbreviations**

A, sodium/alanine symporter; ADMA, asymmetric dimethylarginine; ASC, amiloride-sensitive sodium channel; CBS, cystathionine β-synthase; CHOP, C/EBP homologous protein; cSHMT or mSHMT, cytosolic or mitochondrial serine hydroxymethyltransferase; eNOS, endothelial nitric oxide synthase; ER, endoplasmic reticulum; GAPDH, glyceraldehyde 3-phosphated dehydrogenase; GRP78, glucose-regulated protein 78 kDa; HAEC, human aortic endothelial cell; L, sodium-independent large branched-chain neutral amino acid transport; MS, methionine synthase; SD, standard deviation; siRNA, small interfering RNA; XAG, sodium-dependent aspartate and glutamate transporter; XBP1, x-box binding protein 1

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