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Herpud1 impacts insulin-dependent glucose uptake in skeletal muscle cells by controlling the Ca2+-calcineurin-Akt axis

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### **ACCEPTED MANUSCRIPT**

# Herpud1 impacts insulin-dependent glucose uptake in skeletal muscle cells by controlling the Ca<sup>2+</sup>-calcineurin-Akt axis

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Running title: Herpud1 regulates insulin response in skeletal muscle

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Keywords: Herpud1; insulin; Akt; calcium; calcineurin; skeletal muscle.

Abbreviations: AdLacZ: adenovirus encoding  $\beta$ -galactosidase, CAIN: calcineurin inhibitor, CA-CN: constitutively-active calcineurin, CsA: cyclosporine A, [³H]-2DG: [³H]2-deoxyglucose, ER: endoplasmic reticulum, KO: knockout, Herpud1: homocysteine-inducible endoplasmic reticulum protein with ubiquitin-like domain 1, IR: insulin receptor, IP<sub>3</sub>R: 1,4,5-trisphosphate receptor, OPD: o-phenylenediamine, PI: propidium iodide, siRNA: small interfering RNA.

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