

## Supplementary Material

## SOD1 Lysine 123 Acetylation in the Adult Central Nervous System

Running Title: SOD1 Lysine 123 Acetylation

Michael Kaliszewski<sup>1</sup>, Austin Kennedy<sup>1</sup>, Shelby Blaes<sup>1</sup>, Robert Shaffer<sup>1</sup>, Andrew B. Knott<sup>1</sup>, Wenjun Song<sup>1,2</sup>, Henry Hauser<sup>1</sup>, Blaise Bossy<sup>1</sup>, Ting-Ting Huang<sup>3,4</sup>, Ella Bossy-Wetzel<sup>1,\*</sup>

<sup>1</sup> Burnett School of Biomedical Sciences, College of Medicine, University of Central Florida, Orlando, FL, USA

<sup>2</sup> Yale School of Forestry and Environmental Studies, Yale University, New Haven, CT, USA

<sup>3</sup> Department of Neurology and Neurological Sciences, Stanford University School of Medicine, Stanford, CA, USA

<sup>4</sup> Geriatric Research, Education, and Clinical Center, VA Palo Alto Health Care System, Palo Alto, CA USA

**Correspondence:** Ella Bossy-Wetzel (<u>ella.bossy-wetzel@ucf.edu</u>)





Supplementary Figure 1. Incubation with rabbit preimmune serum. Confocal micrograph (scale bar, 100  $\mu$ m) of a mouse cerebellum sagittal section incubated with preimmune serum collected from rabbit 26 prior to immunization against Ac-K123 SOD1. Nuclei were counterstained with Hoechst 33342. The granular cell layer (GCL) and molecular layer (ML) of the cerebellar cortex are identified.



**Supplementary Figure 2. SOD activity assay.** Superoxide dismutase activity of SOD1 WT, SOD1 K123R, and acetyl-mimetic SOD1 K123Q measured showing inhibition rate (%) of WST-1 reduction by superoxide anion per concentration of purified recombinant SOD1 protein (microgram per mL).