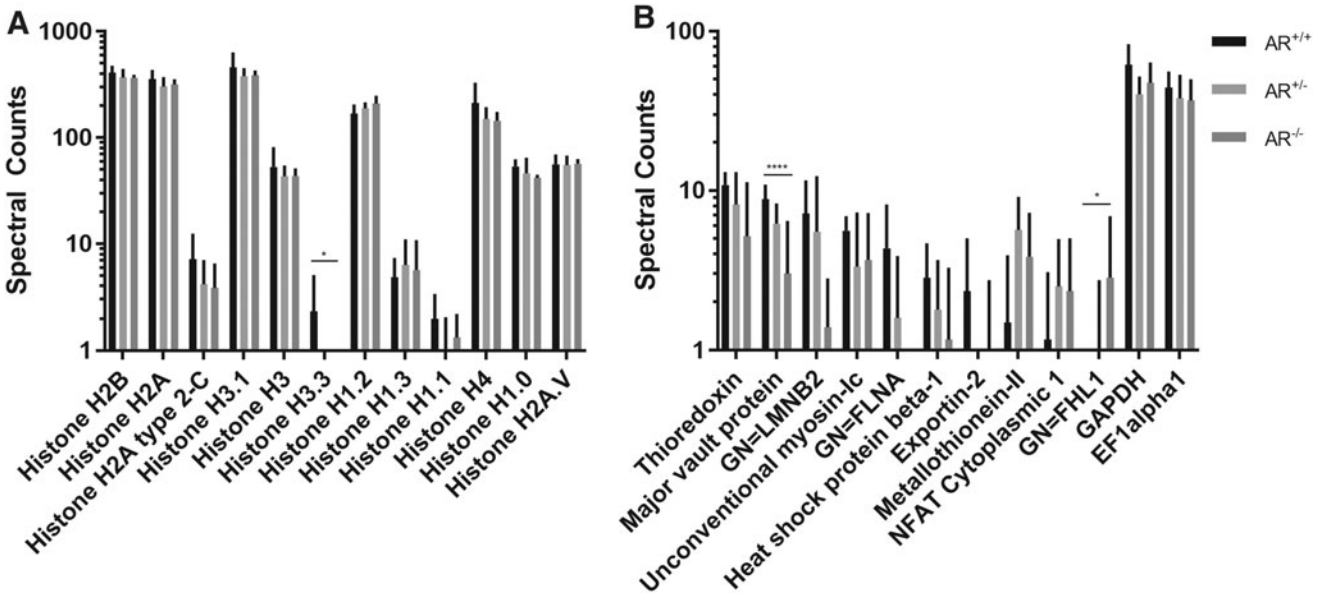
Supplementary Data

Tissue Harvest

Fresh bovine pericardium (BP) was harvested immediately postmortem from young adult cattle (Spear Products, Coopersburg, PA) and shipped on dry ice. Tissue was defrosted and washed in 0.1% (w/v) anhydrous ethylenediaminetetraacetic acid (EDTA), 1% (v/v) antibiotic and antimycotic solution (AAS), phosphate-buffered saline (PBS) (pH 7.4), and 4% (v/v) Tris-HCl (pH 8.0). Tissue underwent dissection to remove connective tissue, and the pericardial sac was cut into 1×16 cm circumferential strips individually stored in Dulbecco's modified Eagle's medium (DMEM) with 15% (v/v) dimethyl sulfoxide (DMSO) at −80°C.[6,8,17,18]

Anti-Native Bovine Pericardium Serum Production

As previously described, all procedures were performed in accordance with the University of California IACUC Guide for Care and Use of Laboratory Animals.[8] New Zealand white rabbits ($n = 2$) received subcutaneous injections of homogenized BP (1 g in 5 mL of 10 mM tris-HCl (pH 8.0), 1 mM dithiothreitol (DTT), 2 mM magnesium chloride hexahydrate ($MgCl_2$–$6H_2O$), 10 mM potassium chloride (KCl), 0.5 mM Pefabloc (protease inhibitor), and Freund's adjuvant at a 1:1 ratio at day 0, 14, 28, and 42.[8] Blood was collected on day 84, centrifuged at 3000 *g* to generate anti-native BP serum, and stored at −80°C.



SUPPLEMENTARY FIG. S1. Effect of magnesium presence or absence on protein removal during nuclease digestion step. Removal of histones **(A)** and nuclear-associated proteins **(B)** during nuclease digestion step is largely unaffected by presence or absence of magnesium. Results plotted in Log [10] scale. **** signifies $p < 0.0001$ and * signifies $p < 0.05$ ($n = 6$ per group).