

Figure S13. Deer mice that were homozygous for the highland *Epas1* variant exhibited a significantly greater increase in heart rate from normoxia (21 kPa  $O_2$ ) to environmentally realistic levels of hypoxia at 4300 m elevation (12 kPa  $O_2$ ). Measurements were made using a MouseOx Plus collar. \* A significant pairwise difference between *Epas1*<sup>H/H</sup> and *Epas1*<sup>H/L</sup> mice. n=26 *Epas1*<sup>H/H</sup>, n=13 *Epas1*<sup>H/L</sup>, and n=4 *Epas1*<sup>L/L</sup> variants.