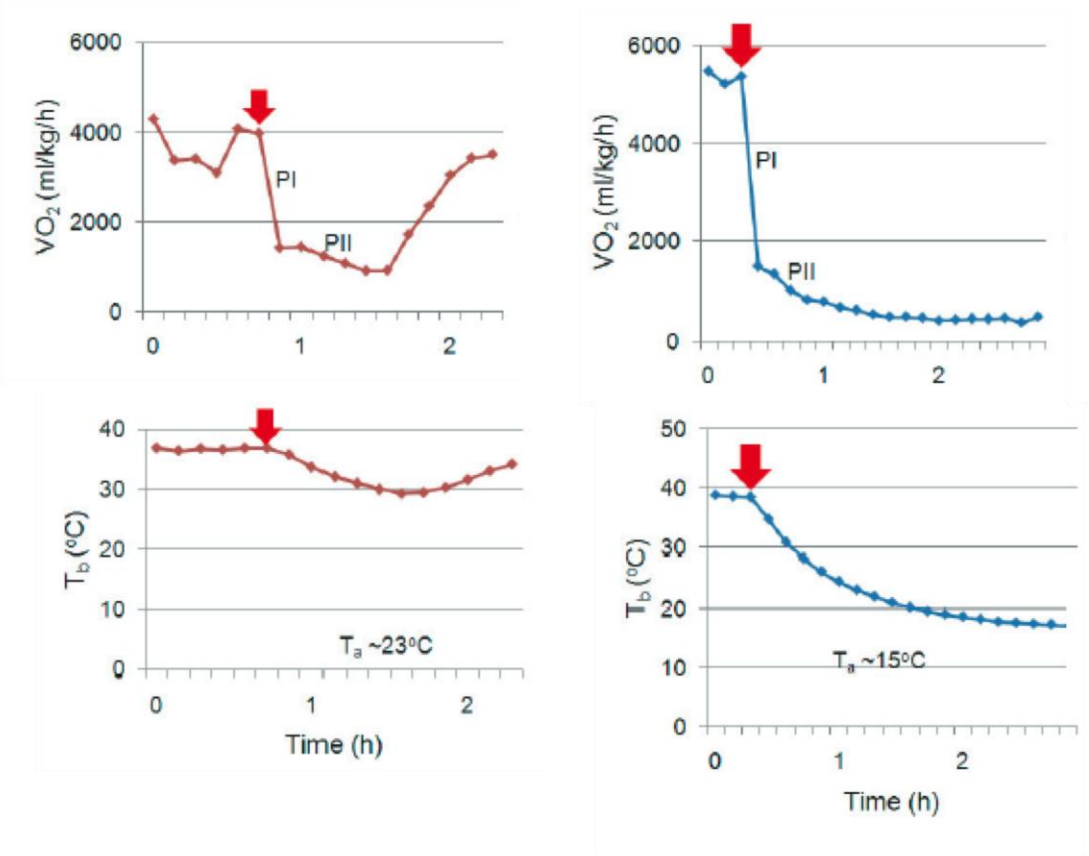
SUPPLEMENTAL FIGURE LEGENDS

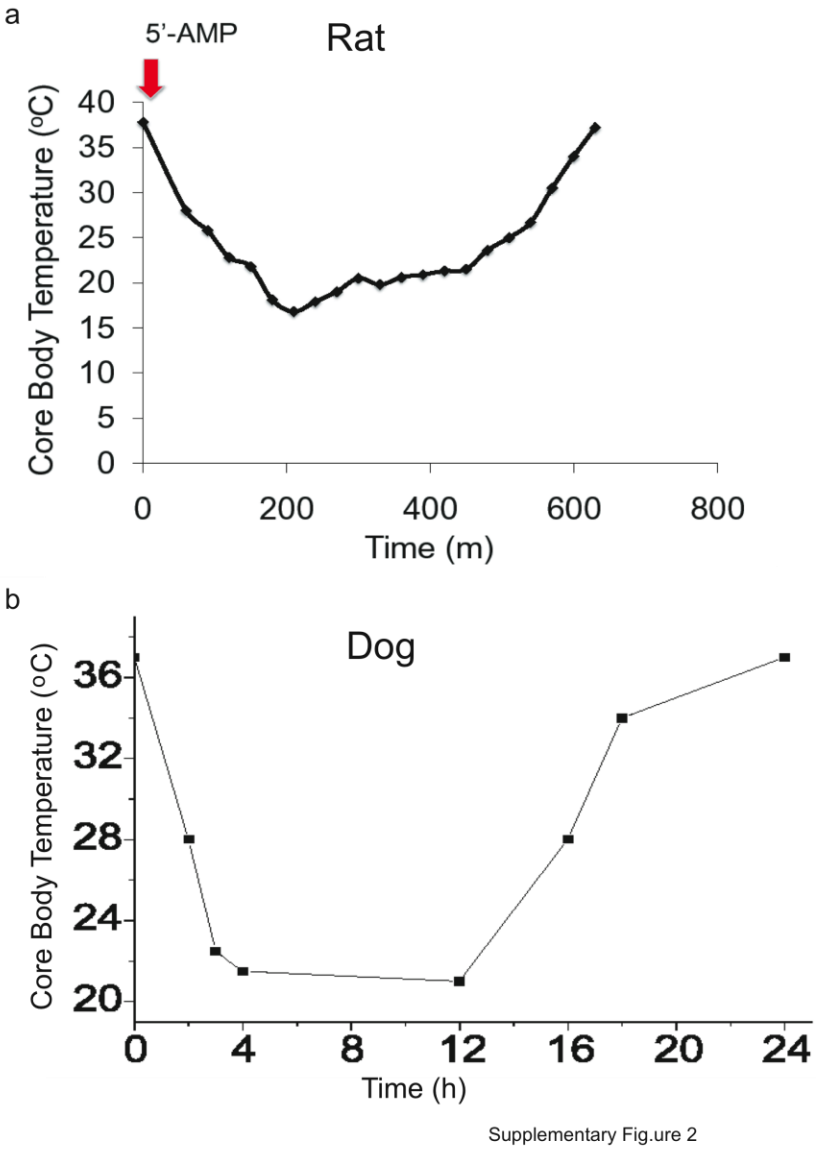
Figure 1. PI and PII state with respect to T_a and T_b. Simultaneous measurement of T_b and VO_2 of mice treated with 5'-AMP (arrow) in individual metabolic chambers at T_a of 23°C and 15°C. Data are from the individual mouse shown in Figure 1 plotted at higher resolution. Sampling time is about 8 minutes.

Figure 2. Deep hypometabolic state of rat and dog. For both rat and dog, once 5'-AMP has been administered, physical interaction was reduced to a minimum and the animals were kept in a dim light environment until DH was apparent. a) Male Sprague-Dawley rats (~450-550 gw) were injected *i.p* with 0.5mg/gw of 5'-AMP and were placed at 4°C T_a for approximately 2 h at which point the animals entered DH with T_b approximately 18°C. Maintained at 15°C T_a, the rat was able to maintain its T_b at about 18-20°C. After about 6 h, arousal was induced by gradual rewarming. b) A representative profile of a Beagle mixed breed dog (~5 kg) given freshly prepared 1.5 mg/gw of 5'-AMP via *i.p* and placed initially at 4°C for about 3 h at which point the animal entered DH with T_b of 22°C. At this stage the animal was transferred and maintained at 18°C T_a for 8 h. The animal maintained its T_b at 21-22°C. Arousal was induced by gradually rewarming the animal and the euthermic state was restored after about 8 hours.

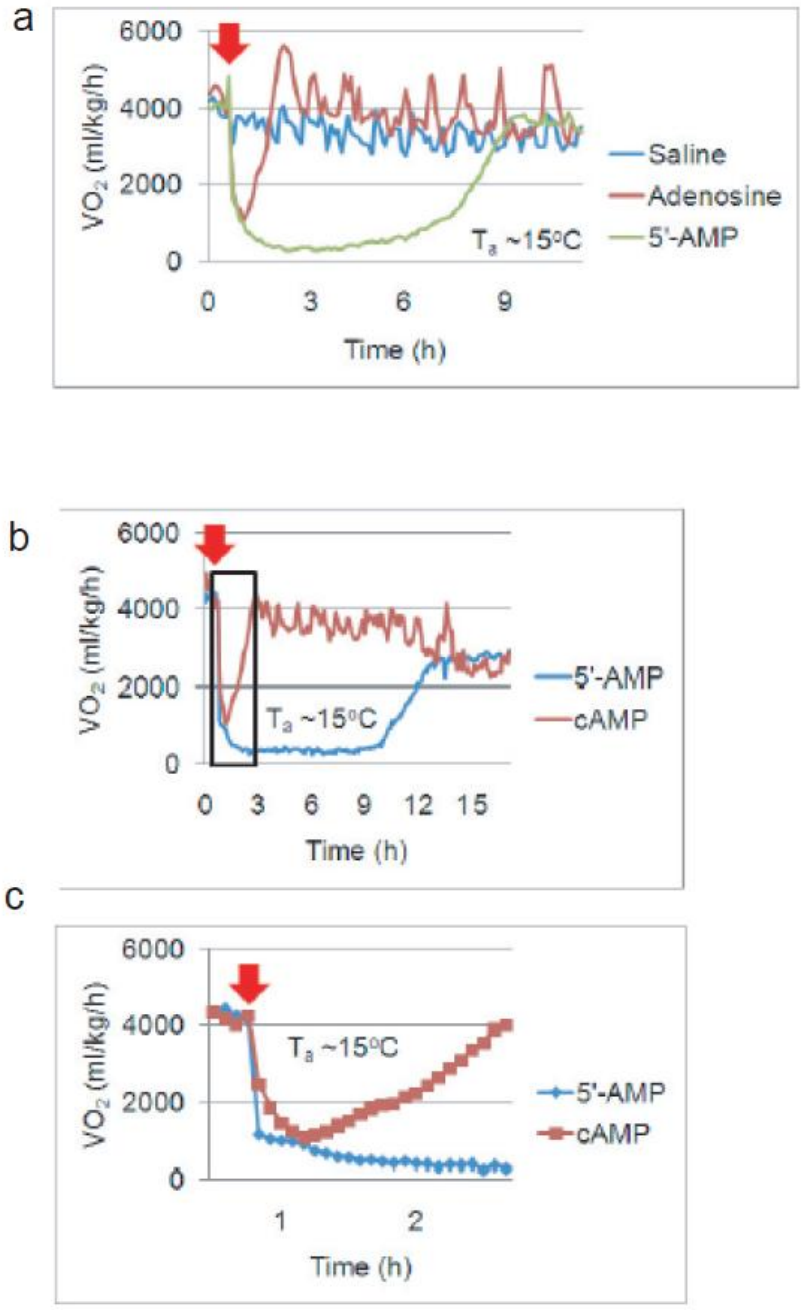
Figure 3. Comparing hypometabolism response of 5'-AMP, adenosine and cAMP. a) VO_2 measurement of mice given saline, 5'-AMP and adenosine (0.5 ml of 10 mg/ml). b) VO_2 measurement of 5'-AMP and cAMP (0.5mg/gw). c) Higher resolution of the highlighted area in (b) measured at 5 minutes sampling time.



Supplementary Figure 1



Supplementary Fig.ure 2



Supplementary figure 3