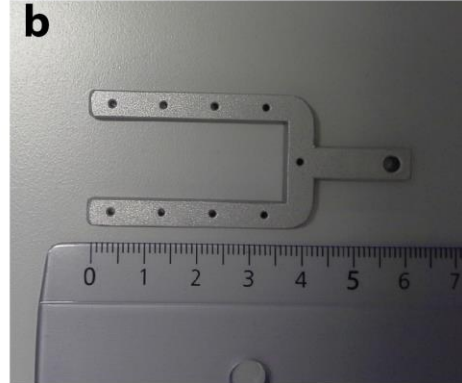


Curved Spatula



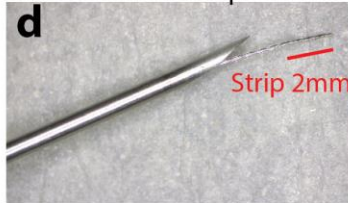
Leg holder



Intramuscular hook electrode



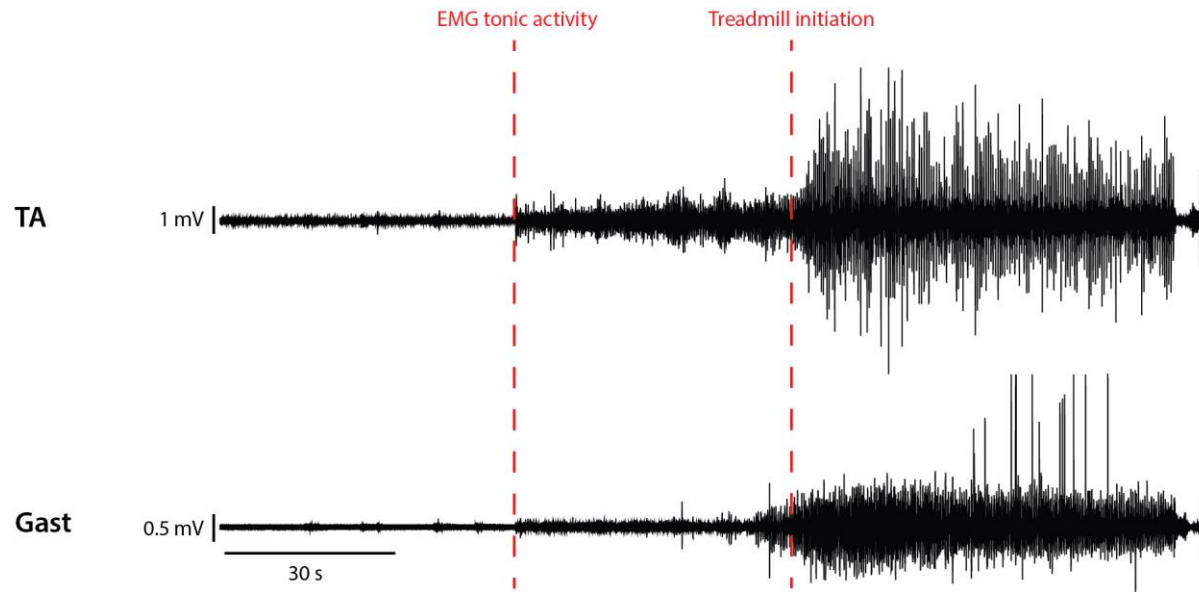
EMG electrode setup



Supplementary Figure 1

Intramuscular hook electrode for recording electromyogram activity within muscles

(a) Rounded and sharpened curved spatula used for decerebration. **(b)** Custom made leg holder used to easily make a mineral oil bath for the hindlimb muscles and nerves. **(c)** One completed intramuscular EMG hook electrode using 3 stranded Teflon coated wire (A-M systems, cat No.793400) run through the lumen of a 23-gauge needle (B-D precisionGlide IM, cat No.305145). **(d)** Stripped 2-3 mm of Teflon coating from the end of the stainless steel wire. **(e)** 180° bend backwards, creating a hook. **(f)** Stainless steel wire hook pulled backwards to rest in the lowest part of the bevel of the lumen. **a** refers to Step 28 of procedure, **b** refers to Step 22. **c-f** refers to Step 32B.



Supplementary Figure 2

Increase in EMG tone indicating a bout of locomotion.

Increase in the amplitude of flexor and extensor EMG (tibialis anterior and gastrocnemius respectively), in the decerebrate preparation, indicating that a locomotor bout was imminent and that the treadmill should be turned on. Tibialis Anterior (TA), Gastrocnemius (Gast). All experiments should be performed in accordance with relevant guidelines and regulations. Local ethics committees have approved all procedures.