|  |  |  |
| --- | --- | --- |
| **Muscle** | **Origin** | **Insertion** |
| **Type of behaviour** | **Type of behaviour** |
| **1** | **2** | **3** | **4** | **1** | **2** | **3** | **4** |
| **Gluteus****medius** | **Ant.** | X |  |  |  |  |  | X |  |
| **Mid.** |  |  | X |  |  | X |  |  |
| **Post.** |  |  | X |  |  |  |  | X |
| **Gluteus****minimus** | **Ant.** |  | X |  |  | X |  |  |  |
| **Mid.** |  |  |  | X | X |  |  |  |
| **Post.** |  |  | X |  |  |  | X |  |
| **Gluteus****maximus** | **Ant.** |  |  |  | X |  |  |  | X |
| **Mid.** |  | X |  |  |  |  |  | X |
| **Post.** |  |  |  | X |  |  |  | X |
| **Adductor longus** |  | X |  |  |  | X |  |  |
| **Adductor brevis** | X |  |  |  |  |  | X |  |
| **Adductor magnus** | **Ant.** |  |  |  | X |  | X |  |  |
| **Mid.** |  | X |  |  |  | X |  |  |
| **Post.** |  |  | X |  |  |  |  | X |
| **Tensor fasciae latae** |  |  | X |  |  |  | X |  |
| **Pectineus** |  |  | X |  |  | X |  |  |
| **Iliacus** |  | X |  |  |  |  | X |  |
| **Psoas** |  |  |  | X |  |  |  | X |
| **Quadriceps femoris** |  |  |  | X |  | X |  |  |
| **Gemelus** | X |  |  |  |  |  | X |  |
| **Perineus** |  |  | X |  |  |  | X |  |
| **Rectus femoris** |  |  |  | X |  | X |  |  |
| **Semimembranosus** | X |  |  |  |  |  | X |  |
| **Semitendinosus** | X |  |  |  |  |  | X |  |
| **Biceps femoris long head** | X |  |  |  |  |  | X |  |
| **Sartorius** |  |  | X |  | X |  |  |  |
| **Gracilis** |  |  | X |  | X |  |  |  |

**Table S3.** **Classification of the muscles according to the types of behaviour defined in section 4.1.**

**Behavior type 1:** The value of$\tilde{∆F}\_{mus}$is outside the threshold and the value$∆F\_{mus}^{t\_{nom}}$is within the range. **Behavior type 2** The value of$\tilde{∆F}\_{mus}$is within the range and the value$∆F\_{mus}^{t\_{nom}}$is outside the threshold. **Behavior type 3:** The values of$\tilde{∆F}\_{mus}$and $∆F\_{mus}^{t\_{nom}}$are within the range. **Behavior type 4:** The values of$\tilde{∆F}\_{mus}$and $∆F\_{mus}^{t\_{nom}}$are outside the range.