

Muscles of the Lower Extremity

MUSCLE	INNERVATION	MAIN ACTIONS	MUSCLE GROUP
Abductor digiti minimi	Lateral plantar nerve	Abducts and flexes 5th digit	Foot - Layer 1
Abductor hallucis	Medial plantar nerve	Abducts and flexes 1st digit	Foot - Layer 1
Adductor brevis	Obturator nerve	Adducts thigh at hip, weak hip flexor	Thigh - Medial
Adductor hallucis	Deep branch of lateral plantar nerve	Adducts 1st digit, maintains transverse arch of foot	Foot - Layer 3
Adductor longus	Obturator nerve (anterior division)	Adducts thigh at hip	Thigh - Medial
Adductor magnus	<i>Adductor part:</i> obturator nerve <i>Hamstring part:</i> sciatic nerve (tibial division)	Adductor part: adducts and flexes thigh Hamstring part: extends thigh	Thigh - Medial
Articularis genus	Femoral nerve	Pulls suprapatellar bursa superiorly with extension of knee	Thigh - Anterior
Biceps femoris	<i>Long head:</i> sciatic nerve (tibial division) (L5–S2) <i>Short head:</i> sciatic nerve (common fibular division)	Flexes and laterally rotates leg, extends thigh at hip	Thigh - Posterior
Dorsal interossei (four muscles)	Lateral plantar nerve	Abduct 2nd through 4th toes, flex metatarsophalangeal joints, and extend phalanges	Foot - Layer 4
Extensor digitorum brevis and extensor hallucis brevis	Deep fibular nerve	Aids the extensor digitorum longus in extending of 4 medial digits at the metatarsophalangeal and interphalangeal joints	Foot - Dorsum
Extensor digitorum longus	Deep fibular nerve	Extends lateral four digits and dorsiflexes foot at ankle	Leg - Anterior
Extensor hallucis longus	Deep fibular nerve	Extends great toe, dorsiflexes foot at ankle	Leg - Anterior
Fibularis peroneus brevis	Superficial fibular nerve	Everts foot and weakly plantarflexes foot at ankle	Leg - Lateral
Fibularis peroneus longus	Superficial fibular nerve	Everts foot and weakly plantarflexes foot at ankle	Leg - Lateral
Fibularis peroneus tertius	Deep fibular nerve	Dorsiflexes foot at ankle and aids in eversion of foot	Leg - Anterior
Flexor digiti minimi brevis	Superficial branch of lateral plantar nerve	Flexes proximal phalanx of 5th digit	Foot - Layer 3
Flexor digitorum brevis	Medial plantar nerve	Flexes 2nd through 5th digits	Foot - Layer 1
Flexor digitorum longus	Tibial nerve	Flexes lateral four digits and plantarflexes foot at ankle; supports longitudinal arches of foot	Leg - Posterior
Flexor hallucis brevis	Medial plantar nerve	Flexes proximal phalanx of 1st digit	Foot - Layer 3
Flexor hallucis longus	Tibial nerve	Flexes all joints of great toe, weakly plantarflexes foot at ankle	Leg - Posterior
Gastrocnemius	Tibial nerve	Plantarflexes foot at ankle joint, assists in flexion of knee joint, raises heel during walking	Leg - Posterior
Gluteus maximus	Inferior gluteal nerve	Extends flexed thigh, assists in lateral rotation, and abducts thigh	Gluteal region
Gluteus medius	Superior gluteal nerve	Abducts and medially rotates thigh at hips; steadies pelvis on leg when opposite leg is raised	Gluteal region
Gluteus minimus	Superior gluteal nerve	Abducts and medially rotates thigh at hips; steadies pelvis on leg when opposite leg is raised	Gluteal region
Gracilis	Obturator nerve	Adducts thigh, flexes and medially rotates leg	Thigh - Medial

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Iliacus	Femoral nerve	Flexes hip and stabilizes hip joint; acts with psoas major	Posterior abdominal wall
Iliacus (Iliopsoas)	Femoral nerve	Flexes thigh at hips and stabilizes hip joint, acts with psoas major	Thigh - Anterior
Inferior gemellus	Nerve to quadratus femoris	Laterally rotates extended thigh at the hip	Gluteal region
Lumbricals	<i>Medial one:</i> medial plantar nerve <i>Lateral three :</i> lateral plantar nerve	Flexes proximal phalanges at MTP joint, extends phalanges at PIP and DIP joints	Foot - Layer 2
Obturator externus	Obturator nerve	Laterally rotates thigh, stabilizes head of femur in acetabulum	Thigh - Medial
Obturator internus	Nerve to obturator internus	Laterally rotates extended thigh, abducts flexed thigh at hip	Gluteal region
Pectineus	Femoral nerve and sometimes obturator nerve	Adducts and flexes thigh at hip	Thigh - Medial
Piriformis	Ventral rami of L5, S1, S2	Laterally rotates extended thigh, abducts flexed thigh at hip	Gluteal region
Plantar interossei (three muscles)	Lateral plantar nerve	Adduct digits (2–4) and flex metatarsophalangeal joint and extend phalanges	Foot - Layer 4
Plantaris	Tibial nerve	Weakly assists gastrocnemius	Leg - Posterior
Popliteus	Tibial nerve (L4–S1)	Weakly flexes knee and unlocks it by rotating femur on fixed tibia	Leg - Posterior
Psoas major	Ventral rami of first four lumbar nerves	Acting superiorly with iliacus, flexes hip; acting inferiorly, flexes vertebral column laterally; used to balance trunk in sitting position; acting inferiorly with iliacus, flexes trunk	Posterior abdominal wall
Psoas major (Iliopsoas)	Ventral rami of first lumbar nerve	Acting superiorly with iliacus, flexes hip; acting inferiorly, flexes vertebral column laterally; used to balance trunk in sitting position; acting inferiorly with iliacus, flexes trunk	Thigh - Anterior
Quadratus femoris	Nerve to quadratus femoris	Laterally rotates thigh at hip	Gluteal region
Quadratus plantae	Lateral plantar nerve	Corrects for oblique pull of flexor digitorum longus tendon, thus assists in flexion of toes	Foot - Layer 2
Rectus femoris (quadriceps)	Femoral nerve	Extends leg at knee joint and flexes thigh at hip joint	Thigh - Anterior
Sartorius	Femoral nerve	Abducts, laterally rotates, and flexes thigh; flexes knee joint	Thigh - Anterior
Semimembranosus	Sciatic nerve (tibial division)	Flexes leg, extends thigh	Thigh - Posterior
Semitendinosus	Sciatic nerve (tibial division)	Flexes leg, extends thigh	Thigh - Posterior
Soleus	Tibial nerve	Plantarflexes foot at ankle, stabilizes leg over foot	Leg - Posterior
Superior gemellus	Nerve to obturator internus	Laterally rotates extended thigh at the hip	Gluteal region
Tensor fasciae latae	Superior gluteal nerve	Abducts, medially rotates, and flexes thigh at hip; helps to keep knee extended	Gluteal region
Tibialis anterior	Deep fibular nerve	Dorsiflexes foot at ankle and inverts foot	Leg - Anterior
Tibialis posterior	Tibial nerve	Plantarflexes foot at ankle and inverts foot	Leg - Posterior
Vastus intermedius (quadriceps)	Femoral nerve	Extends leg at knee joint	Thigh - Anterior
Vastus lateralis (quadriceps)	Femoral nerve	Extends leg at knee joint	Thigh - Anterior
Vastus medialis (quadriceps)	Femoral nerve	Extends leg at knee joint	Thigh - Anterior