

Muscles that Act on the Elbow to Move the Forearm				
Muscle	Action	Origin	Insertion	Innervation
Flexors (anterior arm)				
*Biceps brachii	Flexes elbow, powerful supinator of forearm Long head flexes GH joint	<u>Long head</u> : Supraglenoid tubercle of scapula <u>Short head</u> : Coracoid process of scapula	Radial tuberosity and bicipital aponeurosis	Musculocutaneous nerve
Brachialis	Primary flexor of elbow	Distal humerus	Proximal ulna	
Brachioradialis	Flexes elbow	Lateral distal humerus	Styloid process of radius	Radial nerve
Extensors (posterior arm)				
*Triceps brachii	Primary extensor of elbow Long head of triceps also extends GH Joint	<u>Long head</u> : Infraglenoid tubercle of scapula <u>Lateral head</u> : Posterior humerus <u>Medial head</u> : Posterior humerus	Olecranon process of ulna	Radial nerve

*Actions at both the elbow/forearm and glenohumeral joint are listed here.

Muscles of the Forearm Acting on the Forearm, Wrist, or Hand				
Muscle	Action	Origin	Insertion	Innervation
Anterior Muscles: Superficial				
Pronator teres	Pronates forearm	Medial epicondyle of humerus	Lateral radius	Median nerve
Flexor carpi radialis	Flexes wrist and abducts hand		Base of 2 nd & 3 rd metacarpals	
Palmaris longus	Weak wrist flexor		Palmar aponeurosis	
Flexor carpi ulnaris	Flexes wrist and adducts hand		Medial carpal and metacarpal bones	Ulnar nerve

Anterior Muscles: Intermediate				
Flexor digitorum superficialis	Flexes wrist, 2nd–5th MP joints, and PIP joints	Medial epicondyle of humerus	Middle phalanges of fingers 2–5	Median nerve
Anterior Muscles: Deep				
Flexor pollicis longus	Flexes MP joint of thumb, IP joint of thumb	Anterior shaft of radius	Distal phalanx of thumb	Median nerve
Flexor digitorum profundus	Flexes wrist, 2nd–5th MP joints, PIP joints, & DIP joints	Anteromedial ulna	Distal phalanges of fingers 2–5	Lateral ½ = median nerve Medial ½ = ulnar nerve
Pronator quadratus	Pronates forearm	Distal ulna	Distal radius	Median Nerve
Posterior Muscles: Superficial				
Extensor carpi radialis longus	Extends wrist, abducts hand	Lateral distal humerus	Base of 2 nd metacarpal	Radial nerve
Extensor carpi radialis brevis	Extends wrist, abducts hand	Lateral epicondyle of humerus	Base of metacarpal III	
Extensor digitorum	Extends wrist, 2nd–5th MP joints, PIP joints, & DIP joints		Distal & middle phalanges of digits 2–5	
Extensor digiti minimi	Extends wrist, MP, and PIP joints of finger 5		Proximal phalanx of finger 5	
Extensor carpi ulnaris	Extends wrist, adducts hand		Base of 5 th metacarpal	
Posterior Muscles: Deep				
Abductor pollicis longus	Abducts thumb	Proximal radius and ulna	Lateral 1 st metacarpal	Radial nerve
Extensor pollicis brevis	Extends MP joints of thumb	Posterior radius	Proximal phalanx of thumb	
Extensor pollicis longus	Extends MP and IP joints of thumb	Posterior ulna	Distal phalanx of thumb	
Extensor indicis	Extends MP, PIP, and DIP joints of finger 2	Posterior ulna	Extensor digitorum tendon to 2 nd finger	
Supinator	Supinates forearm	Lateral epicondyle of humerus & proximal ulna	Anterolateral radius	

Intrinsic Muscles of the Hand		
Muscle	Action	Innervation
Thenar Group		
Flexor pollicis brevis	Flexes thumb	Median nerve
Abductor pollicis brevis	Abducts thumb	
Opponens Pollicis	Opposes thumb	
Hypothenar Group		
Flexor digiti minimi	Flexes finger 5	Ulnar nerve
Abductor digiti minimi	Abducts finger 5	
Opponens digiti minimi	Opposition of finger 5	
Midpalmar Group		
Lumbricals	Flexes 2nd–5th MP joints and extends 2nd–5th PIP and DIP joints	Lateral 2 lumbricals: median nerve Medial 2 lumbricals: ulnar nerve
Dorsal Interossei	Abducts fingers 2–5	Ulnar nerve
Palmar Interossei	Adducts fingers 2–5	
Adductor Pollicis	Adducts thumb	