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Muscles and Muscle Tissue

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| **Across****4.** a pale band across a striated muscle fiber that consists of actin**7.** appears as a lighter band in the middle of the dark A band at the centre of a sarcomere**8.** a protein of muscle that together with tropomyosin forms a regulatory protein complex controlling the interaction of actin and myosin**13.** sheath of connective tissue surrounding a bundle of muscle fibers**14.** efers to the condition in which muscles of the body remain semi-contracted for an extended period**16.** a protein found in microfilaments**20.** the cell membrane of a striated muscle fiber cell**21.** protein found in muscle tissue as a thick filament**24.** A muscular contraction in which the length of the muscle does not change**26.** The operation of most skeletal muscles involves leverage**28.** responsible for the passive elasticity of muscle**29.** the repeating unit between two Z lines**31.** a muscle that moves in one direction**33.** a motor neuron and the skeletal muscle fibers innervated by that motor neuron's axonal terminals**34.** connective tissue within the muscle**35.** the decline in ability of a muscle to generate force | **Down****1.** the point of attachment in a muscle where more movement occurs**2.** any of the dark thin bands across a striated muscle fiber**3.** extensions of the cell membrane that penetrate into the centre of skeletal and cardiac muscle cells**5.** fibrous tissue surrounding the cell**6.** controlled by an individual's will**9.** the continuous and passive partial contraction of the muscles**10.** maintain constant tension in the muscle as the muscle changes length**11.** a muscle that contracts while another relaxes**12.** multinucleate cells that make up skeletal muscles **15.** a single contraction resulting from a threshold stimulus**17.** a bundle of structures**18.** the filaments of myofibrils, constructed from proteins, principally myosin or actin**19.** the attachment site that doesn't move during contraction**22.** the striated region of a sarcomere**23.** a movement of a muscle that causes it to become tight**25.** an iron- and oxygen-binding protein found in the muscle tissue**27.** the cytoplasm of a myocyte**30.** is in the center of the A band**32.** is closer to the fulcrum of a lever |