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## **DUAL FILAMENT REGULATION OF MUSCLE CONTRACTION AND THE ROLE OF TITIN**

Muscle contraction at the level of the sarcomere, the  $\sim$ 2  $\mu$ m long structural unit of the striated (skeletal and cardiac) muscles, is controlled by activation of both the thick filament, containing the myosin motors, and thin filament, containing the actin support. X-ray diffraction experiments show that titin takes part in thick filament activation by biasing the myosin motor orientation towards the actin.

