

**Serratus anterior** is a large flat muscular sheet that curves around the side of the thorax between the ribs and the scapula, covering the medial axillary wall. Loose fascia exists between the deep and superficial surfaces of the muscles and ribs and subscapularis, respectively, to facilitate movement.

### **Proximal Attachment**

It arises by fleshy digitations from the external surfaces of the upper eight (nine or ten) ribs and intervening intercostal fascia lying on a slightly curved line running infero-laterally across the thorax anterior to the mid-axillary line: the first digitation arises from the first and second rib, the remainder from single ribs, with the lower four interdigitating with the costal attachment of external oblique.

### **Distal Attachment**

The muscle passes posteriorly around the chest wall to attach to the costal surface of the medial border of the scapula; the first digitation encloses and is attached to the superior angle, the next two or three form a triangular sheet attached along most of the costal surface of the medial border, while the remaining digitations converge to attach by musculotendinous fibers to a triangular impression on the costal surface of the inferior angle.

### **Nerve Supply**

Serratus anterior is supplied by the long thoracic nerve (derived from C5 to C7), which descends over the superficial surface of the muscle. The upper two digitations are supplied by C5, the next two by C6 and the remaining digitations by C7.

### **Action**

Serratus anterior protracts the scapula and pectoral girdle: it stabilizes the scapula during movements of the upper limb contracting strongly to hold the medial border of the scapula against the chest wall. With trapezius the lower fibers laterally rotate the scapula.

*For more information on the shoulder see 'The Interactive Shoulder'.*