The basal lamina is a specialized extracellular matrix (ECM) that plays an essential role in tissue organization and integrity. One component of the Drosophila basal lamina is glutactin, a highly acidic and sulfated glycoprotein with calcium binding activity and sequence similarity to serine esterases, but lacking a critical catalytic serine residue. During embryogenesis, glutactin has been shown to be expressed in the basement membranes enclosing the gut, brain, nerve cord, and sensory bodies. Here we show that glutactin is abundantly expressed in *Drosophila* larva and adults. The protein is highly resistant to non-ionic detergent extraction and remains associated with larval body wall. Immunostaining of larval sections show glutactin localizes to regions enveloping the body wall musculature and, to a lesser extent, visceral muscle. The protein is expressed in all regions of the adult fly, including the head, thorax, legs, and abdomen. Immunostaining is found predominantly along the alimentary canal and digestive tract, including the proventriculus (a specialization of the anterior alimentary canal), midgut, and the rectal ampulla. The presence of the protein in the pericellular matrices surrounding muscles of the thorax and legs, but not of the large indirect flight muscles, suggest specialized differences in matrices associated with adult muscles. Differences are also detected in adult female and male gonads, with staining being more prominent along the reproductive tract in females. The functional consequences of up-regulating and down-regulating the expression of glutactin will be presented.