The fourth lumbar dorsal root ganglia are swellings located on the fourth lumbar dorsal roots, proximal to where the dorsal roots join with the fourth lumbar ventral roots. They are situated in the intervertebral foramina between L4 and L5, immediately lateral to the perforation of the dura by the dorsal root.

The dorsal root ganglia are formed by the cell bodies of somatic and visceral afferent neurons. Each neuron has a single short axon, which divides into a medial branch, which enters the spinal cord via the dorsal root, and a lateral branch, which passes peripherally to a sensory end organ.