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STRUCTURE OF BASAL BODY AND CENTRIOLE

Summary

Basal body and centriole are homologous structures, build of nine triplet microtubules. The basal body/centriole microtubular scaffold is accompanied by numerous structures both microtubular and non-microtubular, which not only cause basal body/centriole polarization but also allow its proper functioning. It is assumed that basal bodies were present in last common eukaryotic ancestor, so-called LECA, and their structure and function appeared such efficient, that they did not change significantly in evolution.

Basal bodies and centrioles play an important role in the cell and the abnormalities in their number, structure or location are observed in numerous cancers, neuropathies and ciliopathies.

Key words: basal body, centriole, triplet