

EWA JOACHIMIAK

*Laboratory of Cytoskeleton and Cilia Biology, Department of Cell Biology, Nencki Institute of Experimental Biology PAS, 3 Pasteur Str., 02-093 Warsaw, E-mail: e.joachimiaak@nencki.gov.pl*

ON THE BASAL BODY AND CILIUM BORDER – CILIARY GATE

Summary

The intraciliary space is not separated from the cell cytoplasm by a membrane, but still it has a unique composition. It is possible due to the existence of so-called ciliary gate localized at the ciliary base. This structure is composed of the distal part of basal body, proximal portion of cilium, transition fibers and Y-links and adjacent part of the cell and ciliary membrane. This complex structure, on one hand retains the unwanted proteins at the ciliary base and, on the other hand, facilitates the intraciliary transport of cargos required for cilia formation and function.

Key words: basal body, ciliary gate, cilium, IFT, transition fibers, transition zone, Y-linkers