

Claudins**Kursad Turksen (ed)****Methods in molecular biology; vol. 762 –****Springer Protocols****Humana Press - Springer Verlag****Heidelberg, 2011****ISBN: 978-1-61779-184-0****461 pp – 88 figs – 109,95€**

I am pretty sure that I do not have to spend a single word to talk about the role played by tight junctions in biological processes and in keeping alive the cellular bases of life! But I am sure as well that the readers should appreciate at least some sentences about this relatively new entry (Claudins have been discovered in 1998) in the world of the proteins complex (Catenins, E-cadherins, Occludins, Cingulins, Actins and few other proteins) of the tight junctions. Dr. Turksen rightly wrote in his very short preface: *...four decades after the morphological identification of tight junctions by Farquhar and Palade, the Claudins have given an opportunity to understand the molecular basis of the tight junction function and their tissue specific roles.* Thus, these 461 pages devoted to Claudins (the first protocol

volume, never published before, entirely devoted to Claudins) are highly welcome.

There are thirty chapters, several illustrate methods to study Claudins, their localizations and the Claudin ion permeability, their *in vivo* imaging (by the use of biotin or claudin-EGFP transgenic Medaka) and their identification by Western blotting. The book could have been better structured with a clear separation between the methodological and biological chapters; this is the only very minor change that some reader like me could suggest to prof. Turksen for a new edition! The role and the way to study Claudins in blood-brain barrier is treated in three exhaustive chapters; the blood-retinal barrier is well presented by Heping Xu and Janet Liversidge by a quantitative *in situ* analysis; the dynamics of Claudins expression in colitis; expression and function in liver cells; in intestinal epithelial barrier; in cancer and endothelial cells and in many other interesting physiological processes.

This is certainly a volume that will make happy all of us want to be inspired to open a new *window* in their research activities.

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