Comment > Kidney Int. 2018 Mar;93(3):535-537. doi: 10.1016/j.kint.2017.09.032.

Claudins: a tale of interactions in the thick ascending limb

Eric Olinger [1], Pascal Houillier [2], Olivier Devuyst [3]

Affiliations + expand

PMID: 29475543 DOI: 10.1016/j.kint.2017.09.032

Abstract

The claudins are the main proteins composing the tight junctions. The differential expression of claudin isoforms contributes to the specificity of paracellular transport pathways along the kidney tubule. Recent studies focusing on claudin-10 and claudin-16 support the longitudinal specialization of paracellular transport of cations within the thick ascending limb and demonstrate that complex tubular adaptations operate to buffer the consequences of chronic segmental lesions in the kidney.