

Basic and Clinical Aspects of Tight Junction-associated Proteins

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Abstract : The intercellular tight junction (TJ) has two important functions ; one is a 'barrier function' and the other is a 'fence function'. TJ-associated proteins are key molecular components governing cellular adhesion, polarity and glandular differentiation. In recent years, numerous proteins have been newly described as TJ-associated proteins and they have also been shown to play critical roles in the cellular proliferation and neoplastic pathway via their functions as intracellular signaling pathways. We herein present an overview of the basic and clinical aspects of the structures and functions of TJ-associated proteins.

Key words : Cell adhesion molecule, Tight junction, Occludin, Claudin family