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〈特別講演〉

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体内の水分調節とアクアポリン

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Regulation of Water Balance within the Body and Aquaporins

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Abstract

Water should be delivered throughout all components of the body. For this purpose, there are membrane channel proteins which permeate water, named aquaporin. So far 13 members are identified in mammals, and their distribution, function and regulation are different. In addition to water permeation, some aquaporins are shown to permeate small solutes and gasses. Loss of function of aquaporin has been shown to cause mouse phenotypes and human diseases. Future research will show a variety of functions of aquaporin in the body.

Key words: aquaporin, water, channel, skin.