

Complexity and developmental changes in the expression pattern of claudins at the blood-CSF barrier

Histochemistry and Cell Biology

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ESM_3 Tentative classification of claudins as pore-forming or barrier-tightening proteins

Based on *in vivo* (KO-animals) or *in-vitro* cell culture models (reviewed partly in Furuse and sukita (2006)
 Trends Cell Biol 16:181-188; Krause et al. (2008) BBA 778:631-645.

Barrier-tightening	References
Cld-1	Furuse et al. (2002) J Cell Biol 156:1099-1111.
Cld-3	Milatz et al (2010) Biochim Biophys Acta 798:2048-2057
Cld-4	Van Itallie et al. (2001) J Clin Invest 107:1319-1327.
Cld-5	Morita et al. (1999) J Cell Biol 147:185-194. Nitta et al. (2003) J Cell Biol 161:653-660.
Cld-9	Nakano et al. (2009) PLoS Genet 5:e1000610.
Cld-11	Gow et al. (1999) Cell 99:649-659. Morita et al. (1999) J Cell Biol 145:579-588.
Cld-14	Ben-Yosef et al. (2003) Hum Mol Genet 12:2049-2061.
Cld-19	Miyamoto et al. (2005). J Cell Biol 169:527-538.
Pore-forming	Reference
Cld-2	Furuse et al (2001) J Cell Biol 153:263-272. Muto et al (2010) PNAS, 107:8011-8016.
Cld-6 ?	Turksen and Troy (2002) Development 129:1775-1784.
Cld-10	Van Itallie et al. (2006) Am J Physiol Renal Physiol 291:F1288-1299.
Cld-12	Fujita et al. (2008) Mol Biol Cell 19:1912-1921.
Cld-16	Hou et al. (2007) J Biol Chem 282:17114-17122.
Cld-16 in association with Cld-19 in kidney	Angelow et al. (2007) Am J Physiol Renal Physiol 293:F166-177. Hou et al. (2008) J Clin Invest 118:619-628.

The definite functions of Cld-6 and Cld-22 are currently unknown.