



Organic Cation Transporters (OCTs)

Guest Editor:

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Message from the Guest Editor

OCTs are solute link-carriers, belonging to the SLC22A family of transporters; they are often found in epithelial membranes and they mediate the uptake and secretion of organic cations. Based on the driving force for substrate transport, they can be classified into the electrogenic transporters OCT1 (SLC22A1), OCT2 (SLC22A2), OCT3 (SLC22A3), and the pH-dependent novel transporters OCTN1 (SLC22A4) and OCTN2 (SLC22A5). While OCTNs are mainly known for their ability to mediate carnitine influx, OCTs can translocate small (<500 Da) organic cations with broad, overlapping affinities for a wide range of substrates. The presence of these transporters is widely documented in the liver, kidneys, intestine, lung, and blood–brain barrier. Topics of the Issue may include, but are not limited to the following: The role of OCTs in the maintenance of cell/tissue homeostasis and function; The modulation of OCTs expression and function; Defects in OCTs and human diseases; Pharmacological relevance of OCTs and their interaction with known and candidate drugs.





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Message from the Editor-in-Chief

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