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PROPOSITIONS

belonging to the thesis

On the membrane transport mechanism of zinc ions by ZntB

by

Artem Stetsenko

1. The 2-TM-GxN family consists of both channels and transporters (Chapter 2, 3 and 4).
2. ZntB is a zinc ion importer, driven by a proton gradient (Chapter 2 and 3).
3. ZntB is a stable symmetrical pentamer in the apo-state in contrast to CorA (Chapter 2).
4. Amino acid Glu253 in ZntB is most likely responsible for proton coupling (Chapter 3).
5. CorA can transport the same ions as ZntB with similar K_m values (Chapter 4).
6. n-Dodecyl- β -D-maltopyranoside (DDM) is the most commonly used detergent for solubilization of membrane proteins and further studies (Chapter 5).
7. Sometimes, reviews with the general information are more valuable to scientific community than detailed long-term research (Chapter 5).
8. Our world has more and more information, and less and less meaning. Inspired by Jean Baudrillard