

Influence of palmitoylation on tight junction protein assembly Nandhini Rajagopal, Flaviyan Jerome Irudayanathan, and Shikha Nangia Department of Biomedical and Chemical Engineering & Syracuse Biomaterials Institute, Syracuse University

Introduction



properties – Protein trafficking and sorting



Molecular mechanism not well understood

This work

Blood-brain barrier

- Highly selective



Molecular Dynamics simulations:

- Along the secretory pathway of claudin-5 –

- 1. Chamberlain, L. H., Shipston, M. J., Physiology of S-Acylation, *Physiological Reviews*, 2015,
- 2. Irudayanathan, F. J., et al, Molecular Architecture of the Blood Brain Barrier Tight Junction

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