



Library Indian Institute of Science Education and Research Mohali



DSpace@IISERMohali (/jspui/)
/ Publications of IISER Mohali (/jspui/handle/123456789/4)
/ Research Articles (/jspui/handle/123456789/9)

Please use this identifier to cite or link to this item: <http://hdl.handle.net/123456789/2239>

Title:	Structural-Mechanical and Biochemical Functions of Classical Cadherins at Cellular Junctions: A Review and Some Hypotheses
Authors:	Tiwari, Prince (/jspui/browse?type=author&value=Tiwari%2C+Prince) Mrigwani, Arpita (/jspui/browse?type=author&value=Mrigwani%2C+Arpita) Kaur, Harpreet (/jspui/browse?type=author&value=Kaur%2C+Harpreet) Kaila, P. (/jspui/browse?type=author&value=Kaila%2C+P.) Kumar, Rajendra (/jspui/browse?type=author&value=Kumar%2C+Rajendra) Guptasarma, P. (/jspui/browse?type=author&value=Guptasarma%2C+P.)
Keywords:	Cell adhesion Neuronal cadherins Cadherin interactions Calcium binding Metastasis Development Cancer
Issue Date:	2018
Publisher:	Springer New York LLC
Citation:	Advances in Experimental Medicine and Biology, 1112, pp. 107-138
Abstract:	This article begins with a general review of cell adhesion molecules (CAMs) and narrows the focus down progressively to the cadherins (calcium binding-dependent CAMs), classifications of subfamilies of the cadherins, type I (E- and N-) cadherins, evolutionary relationships amongst cadherins, structural-mechanical and functional consequences of calcium binding to the cadherins, differential molecular interactions involving the extracellular (ecto) and intracellular (cytoplasmic) domains of the cadherins, multiple adherence-related homophilic and heterophilic interactions and associated functions of E- and N-cadherin in organismal development and disease and cadherin trafficking and membrane rafts. It ends by summarizing multiple perspectives and hypotheses concerning different aspects of cadherin structure, stability and function.
URI:	https://link.springer.com/chapter/10.1007/978-981-13-3065-0_9 (https://link.springer.com/chapter/10.1007/978-981-13-3065-0_9) http://hdl.handle.net/123456789/2239 (http://hdl.handle.net/123456789/2239)
Appears in Collections:	Research Articles (/jspui/handle/123456789/9)

Files in This Item:

File	Description	Size	Format
Need to add pdf.odt (/jspui/bitstream/123456789/2239/1/Need%20to%20add%20pdf.odt)		8.63 kB	OpenDocument Text

[View/Open \(/jspui/bitstream/123456789/2239/1/Need%20to%20add%20pdf.odt\)](#)

[Show full item record \(/jspui/handle/123456789/2239?mode=full\)](#)

[Statistics \(/jspui/handle/123456789/2239/statistics\)](#)

Items in DSpace are protected by copyright, with all rights reserved, unless otherwise indicated.