

Angioinhibitory signaling mechanism(s) in choroidal endothelial cells by type IV collagen fragment

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Abstract

Choroidal Neovascularization (CNV) leads to loss of vision in Age Related Macular Degeneration (AMD) that affects approximately 1 in 3 individuals over the age of 65. CNV of AMD is as common as cancer and one of the most prevalent causes of blindness in the United States of America. It has long been recognized that drugs targeting neovascularization may provide new and useful tools for the treatment of patients with CNV of AMD. The present available therapies in clinical trials come in the form of antibodies or antibody fragments that inhibit VEGF, which can only slow the progression of this eye disease. A renewed effort must therefore be made to identify efficient endogenous molecules that could be exploited as therapeutic agents. Thus, the present study shows the different angioinhibitory signalling mechanism(s) regulated by collagen type IV fragment $\alpha 3(IV)NC1$, whose mechanism of actions are yet to be deciphered

Biography

Sudhakar Akul Yakkanti is the founder Director of Cell Signaling, Retinal and Tumor Angiogenesis Laboratory at Boys Town National Research Hospital, Associate Professor at University of Nebraska Medical Center, Omaha, NE, USA. He did his postdoctoral training at Harvard Medical School, Boston, MA, USA (2003). He received President's fellowship (1992), GATE (1996) and CSIR (2007-2000) fellowships from Government of India. He received Mahindra & Mahindra Educational Award (2000) and Young Clinical Scientist Awards from FAMRI in 2007 and 2010. He also received Bio-Bio Young Scientist Award from OMICS publishing group; Michael A. O'Connor Young Investigator Award; RO1 grant Award from NIH/NCI and Research Scholar Grant from ACS (2010-funding on "Pay-if category"). He is serving as AIBS/NIH-RO1 Grant reviewer for DT study section. He has published more than 40 research articles in several top journals including Science, Cancer Cell, JCI, Blood, PNAS, Gastroenterology, Cancer Research, JBC etc. He is serving as an Editor-in-Chief, Executive Editor, Editor and Editorial board member of reputed journals and is serving as a reviewer for more than 26 scientific journals including JCI, Blood, Circulation, Circulation Research, Cancer research, Clinical Cancer research etc. He was honored by giving a position as Keynote Speaker, Chairman, Co-chairman and organizing committee member for several international conferences