CHAPTER 31

MEDICAL SCIENCES
IMMUNOLOGY

Doctoral Theses

293. SOUMYA PATI
Structural and Functional Evaluation of c-Kit Tyrosine Kinase : Implications Proliferation, differentiation and Survival of Hematopoietic Stem Cells.
Supervisor : Dr. O. P. Kalra
Th 15816

Abstract

Studies c-kit tyrosine kinase which was employed as therapeutic molecule for enhanced recovery of hematopoietic system, as it has extensive potential to transduce different stage specific signals specific for self-renewal, proliferation, differentiation and survival of quiescent hematopoietic progenitors ($Lin^{-}Sca._{1}^{+}c\text{-}Kit^{low}/c\text{-}Kit^{-}$/murine or $CD34^{+}$/ Human). The basic structural and functional determinants of c-Kit tyrosine proto-oncogene is helpful in determining and implicating the crucial signal involved in regeneration of hematopoietic compartment in bone marrow cells in lethally irradiated hosts.

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