

## (12) Indian Patent Specification

---

(11) Patent Number: 238817      (21) Application Number: 142/CHENP/2005

(22) Filing Date: 08/02/2005      (43) Publication Date: 30/03/2007      (45) Grant Date: 05/03/2010

(71) Applicant(s): Indian Institute of Science (IN)  
Indian Immunologicals Limited (IN)

(72) Inventor(s): Pundi, Narasimhan Rangarajan  
Villuppanoor, Alwar Srinivasan  
Biswas, Subhabrata  
Reddy, Guddeti Sreenivasa

(51) International Classifications: A61K

(86) International Application Number and Date: PCT/IN2001/000018    15/02/2001

(87) International Publication Number: WO/2002/078732

(54) Title: A NOVEL VACCINE FORMULATION CONSISTING OF DNA VACCINE INACTIVATED VIRUS

(57) Abstract: Disclosed herein is a novel vaccine formulation for prophylactic or therapeutic immunization of vertebrates against infections caused by vertebrate viruses. The said vaccine contains a minimum of two components, one of which is a deoxyribonucleotide (DNA) vaccine comprising of a DNA molecule that encodes a polypeptide of the virus and the other component consisting of inactivated form of the virus. This invention can also be used to develop low cost inactivated virus-based vaccines that contain much lower amount of the said virus than that present in similar vaccines known in the prior art. This invention also relates to a process of producing the said novel vaccine formulation and the use of the said formulation.