

Hybridoma technology

M. Hima Bindu

Anurag Group of Institutions, India

The potential benefits of using passively administered antibodies for immunization against infectious diseases, for targeting tumors, and for identifying injured tissue are well accepted. However, the heterogeneity of the immune response as well as the technical and possible ethical problems involved in generating human antibodies has prevented the full use of the natural products of the human humoral immune system. The hybridoma technology developed by Kohler and Milstein promised to solve these problems. This technology makes it possible to immortalize the antibody-forming cells from an immunized host by fusion with a myeloma cell and to generate clones of cells that will produce a single, homogeneous antibody. The hybridoma cells can be frozen, grown in mass culture, or injected into an animal to form tumors which produce large amounts of the antibody. The ability to freeze the cells for long-term storage makes it possible to have the same antibody available indefinitely. This is crucial for carrying out clinical trials. The hybridoma technology has made it possible for the first time to generate mono specific antibodies to antigens which are impure and often poorly characterized. The bio-availability libraries of mono clonal antibodies allows selection of antibodies with specific affinities and functional characteristics.

Biography

M. Hima Bindu is pursuing M.Pharmacy (Analysis) from School of Pharmacy, Anurag Group of Institutions, JNTU-H. She completed her graduation from Sri Indu Institute of Pharmacy, JNTU-H. She has presented a poster on Fourier Transform Infra Red Spectroscopy in a National level seminar competition.

hmbnd.07@gmail.com

Estimation of naproxen and esomeperazole magnesium in tablet dosage form vimova TM by RP HPLC method

Maimuna Bombaywala and Michael Y Rangoo

Pataldhamal Wadhvani College of Pharmacy, India

A reverse phase high performance liquid chromatographic method (HPLC) has been developed and validated for the determination of Naproxen and Esomeperazole Magnesium in tablets formulation using C18 Nucleosil column. The mobile phase C18 Nucleosil (Methanol: KH₂PO₄ Buffer (10 mM) (60:40, 1.5ml Ph4.48) was pumped at a flow rate of 1.5 ml/min and the eluents were monitored at 260.0 nm. Linearity was obtained in the concentration range of 300-700 µg/ml for NAP and 12 -28 µg/ml for both ESO. The results of analysis have been validated statistically and by recovery studies. The value of standard deviation was satisfactory and recovery studies in range. Due to its simplicity, rapidness, high precision and accuracy, the proposed HPLC method may be used for determining Naproxen and Esomeperazole Magnesium in bulk drug samples or in pharmaceutical dosage form.

Biography

M. A. Bombaywala has completed her M.Pharm (gold medalist) at the age of 31 years from S.G.B. Amravati University. She is working as Assistant Professor, at P.Wadhvani College, Yavatmal. She has published 3 papers in reputed journals.

maimuna_bom@yahoo.co.in