

RESEARCH SCIENTIST II

Summary

An analytical and detail oriented research scientist with more than 16 years of experience in molecular and cell biology. Principal strengths include management of projects, tissue culture, and assay development with exceptional problem solving, communication, and multi-tasking skills, in a dynamic team environment.

Highlights

- Tissue Culture
- Mouse Hybridoma Generation
- cDNA Cloning
- New Technology Adoption
- Antibody Validation
- Assay Development
- Recombinant DNA technology
- Process Improvement

Accomplishments

Established blot library which included testing materials for antibody validation for Western blot, Immunocytochemistry, Immunoprecipitation, Chromatin IP applications. Personally validated all testing materials to ensure successful validation of antibodies. These efforts increased annual New Product release from 200 antibodies in 2006, to 600 antibodies in 2014.

PUBLICATION: A role for transferrin receptor in triggering apoptosis when targeted with gambogic acid. Kasibhatla S, Jessen KA, Maliartchouk S, Wang JY, English NM, Drewe J, Qiu L, Archer SP, Ponce AE, Sirisoma N, Jiang S, Zhang HZ, Gehlsen KR, Cai SX, Green DR, Tseng B. Proc Natl Acad Sci U S A. 2005 Aug 23;102(34):12095-100. Epub 2005 Aug 15.

Experience

Research Scientist II

May 2007 to Current Exact Sciences 1/4 Grand Forks , ND

R&D Validation Blot Library (Core Group) - Founding team member - Tissue Culture and inventory of all cell lines - Mycoplasma free maintenance of cell lines - Created Library of Cell and Tissue lysates for IP and Immunoblot applications. This included cell stimulations and transient transfections, human stem cell and differentiated cell lysates - Generated Fixed Cell pellets and Chromatin for the development of antibodies for Chromatin Immunoprecipitation (ChIP) application - Validation of Chromatin by ChIP and real-time PCR - Immunocytochemistry validation of antibodies.

Polyclonal Antibody Development Laboratory - Assay antibodies for research diagnostic reagent products by Western blot both manually and by liquid handling Tecan robot for high throughput screening with emphasis on epigenetic targets including histone modifications - Support all efforts to successfully screen antibodies including western blotting, immunoprecipitation, ChIP, and dot blot screening - Complete documentation for antibody product development in Oracle and Accolade - Immuno-affinity purification of polyclonal antibodies using Bio-Rad Biologics FLP system - In-house Inventory adjustments to bring polyclonal antibodies to market - Laboratory EHS Officer

Monoclonal Antibody Development Laboratory - Western Blot and ELISA titrations of eye bled immunized mouse sera for hybridoma generation (10 projects/week)- Subcloning of hybridoma cell lines - WB & Luminex validation of nonpurified and purified monoclonal antibodies - Project management, data processing, and documentation within the Product Development Process to ensure monoclonal antibody product is successfully launched.

Associate Scientist II

December 2006 to April 2007 Planet Pharma 1/4 Lake Forest , IL

In-Cell assay development for Apoptosis activity - Implementation of Cell Death ELISA Plus Assay (Roche) for primary in-cell Assay of kinase inhibitors identified in-house - Development of Immunoblots for PARP, Bim, and Caspase-3 using Odyssey IR Technology. JAK2 Program - Development of Immunoblots for detection of p-Tyr of JAK2 for JAK-2 kinase inhibitors

Research Associate III

February 2003 to December 2006 Clontech Laboratories, Inc. 1/4 San Jose , CA

Conducted primary screen of small molecule libraries to identify Caspase-3 inducing activity by HTS - Conducted secondary dose response assays of candidates - Conducted growth inhibition assays of candidates using CellTiter96[®] Assay Kit (Promega) - Cloned target genes of drug candidates - Produced recombinant human Transferrin Receptor to conduct an invitro binding assay for a small molecule via a bacterial expression system - Determined Kd of small molecule to human Transferrin Receptor - Assayed small molecules using CycLex Aurora A Kinase ELISA (MBL International Corp.)

Senior Research Associate

June 2001 to February 2003 Arcturus Therapeutics Ltd. 1/4 San Diego , CA

Isolated, cloned and characterized variable domains of monoclonal light and heavy chain IgG genes for anti-infective antibody production in maize - Cloned VH and VL of anti-K99 monoclonal antibody from hybridoma cell pellet by RT-PCR - Generated binary vector of recombinant IgG genes for maize stable transfection - Calculated the levels of antibody expressed in individual corn plants by ELISA - Conducted Antigen binding

ELISA with leaf and seed extract - Planning and coordination of project to meet research group goals - Presentation of data on quarterly basis - Presented poster at the institute annual conference - Trained technicians to support project development

Scientist

January 2000 to May 2001 Abcam Plc 1/4 Natick , MA Identified organ specific genes in rice by DNA microarray - Generated cDNA libraries of rice root and shoot organs - Created 384-spot slides of cDNAs for DNA microarray assays - Cloned promoters of root specific genes and fused them to nematocidal genes for rice transfection - Trained technicians to support project development

Laboratory Research Assistant II

October 1997 to December 2000 University Of Utah 1/4 Price , UT

Conducted research of human galectin-4 in tumor progression - Cloned the human galectin-4 gene - Characterized the promoter of galectin-4 - Produced and purified recombinant galectin-4 protein

Research Fellow

June 1995 to August 1995 University Of Utah 1/4 Snowbird Ski And Summer Resort , UT

Characterized the expression of the human Id-2 gene

Research Fellow

June 1994 to August 1994 UNIVERSITY OF CALIFORNIA AT IRVINE 1/4 City , STATE

Studied the mitochondrial localization of Cytochrome C oxidase - Assayed Cytochrome C oxidase import using Yeast Mitochondria

Education

MS : Biology University of California at San Diego 1/4 City , State , US

BS : Genetics University of California at Davis 1/4 City , State , US

Skills

Tissue Culture, Mouse Monoclonal Antibody production, Cloning, Purification of protein, DNA & RNA, Western Blot, ELISA, Luminex, ICC, IP, ChIP, Real-time PCR, Liquid Handling automation, Invitro and Cell based Assay Development, Project Management, Product Development, GLP expertise, Detail Oriented, Problem Solving, Collaborative, Environmental Health and Safety compliant.