

# DOWNLOAD PDF ISOLATION AND CULTURE OF MURINE MACROPHAGES JOHN Q. DAVIES AND SIAMON GORDON

## Chapter 1 : JoVE | Peer Reviewed Scientific Video Journal - Methods and Protocols

*Isolation and culture of murine macrophages. John Q Davies; Siamon Gordon; Methods to isolate and culture human monocyte-derived macrophages and alveolar macrophages are described.*

Martin Stacey Ralph Sanderson From bloodjournal. For personal use only. Copyright by The American Society of Hematology; all rights reserved. Antibody-blocking studies subse- the EMR2 ligand was identified as chon- lutionarily conserved endogenous ligand quently revealed that the fourth EGF-like droitin sulfate CS. The largest isoform of CD97, in a dose-dependent manner. In addition, in situ staining of the an identical EGF-like module, also binds and results in cell attachment. This is the ligand has revealed specific in vivo pat- to the putative EMR2 ligand. Through the first report of a GAG ligand for the TM7 terns consistent with a connective tissue use of mutant Chinese hamster ovary receptors extending the already vast reper- distribution. A dual adhesion and signaling adhesion molecules through interactions mediated by the function has been suggested for these molecules whereby the EGF-like domains. Submitted November 21, ; accepted June 17, Prepublished online hlin molbiol. Therefore, and solely to indicate this fact, this article is hereby Wellcome Trust G. The resulting constructs produced soluble EGF- and antimicrobial peptides. The bead-protein finely adjusted by a small number of amino acid changes on the complex was then added to single-cell suspensions in a well plate surface of the EGF-like modules. Where indicated, cells were pretreated with various enzymes for 30 minutes at EMR2-specific cellular ligands might exist. For the blocking by exogenous GAGs, in myeloid cell migration and trafficking. Laboratory-bred mice were housed in and provided by the animal facility at the Sir William Dunn School of Pathology Tissue staining using multivalent fluorescent probes under standard pathogen-free conditions. The sections were washed 8 times in ice-cold HBSS solution and medium. Tissues were finally washed in blocking Kingdom. Supernatants Generation of biotinylated mouse Fc fusion proteins recognizing both transfectants were further screened using transiently transfected COS cells. The hybridomas were cultured and purified From bloodjournal. Plates were washed with PBS and ric analysis. In contrast, all other probes 0. The ligand for 30 minutes. In addition, pretreatment addition of cells. Immuno- has been demonstrated to be crucial for the structural integrity and cytochemical analysis was carried out with a confocal laser scanning function of several other EGF-like domain-containing proteins. Furthermore, the subsequent addition of 10 mM CaCl<sub>2</sub> restored probe binding to the normal level, whereas the To search for potential cellular ligands for human EMR2, a subsequent addition of 10 mM MgCl<sub>2</sub> did not. Finally, the biotinylated proteins were coupled in a capable of binding CHO-K1 cells suggests that the fourth EGF-like specific orientation to avidin-coated fluorescent beads Figure domain might be an important element of the ligand-receptor 1A-B to screen for ligand-bearing cells or tissues. In an attempt to dissect the ligand-binding site on EMR2, possesses a number of naturally occurring splice variants contain- anti-CD97 antibodies were used in blocking studies. A number of Figure 1. A A schematic representation of the biotinylated mouse Fc fusion proteins. The EGF-like modules are represented as triangles, gray circles represent the mouse Fc region, and the small black circles indicate the biotinylation signal. D The ligand binding is protease sensitive, demonstrating the requirement of cell-surface proteins for the EMR2-ligand interaction. Characterization of the EMR2-ligand interaction. Expression of cell-surface EMR2 was determined by flow cytometric analysis using 2A1 mAb and an isotype-control Ab data not shown. The formation of cell rosettes in single-cell suspensions right panel. Error bars are equal to one standard deviation. This result indicates that the major ligand-binding site is and primary cells Table 1. Of the primary cells tested, only dermal located at the EGF-like domain 4. All nonadherent cells tested failed to bind the and 5. Tissue distribution of EMR2 ligand. Multivalent probes green were used to examine the distribution of the EMR2 ligand in human and mouse tissues. Double staining was performed with either Hoechst stain blue to highlight nuclei or an antihuman collagen I antibody red. Adjacent sections were stained with hematoxylin and eosin. Observation by light microscopy showed that cells attached and spread within 1 hour when plated onto

## DOWNLOAD PDF ISOLATION AND CULTURE OF MURINE MACROPHAGES JOHN Q. DAVIES AND SIAMON GORDON

fibronectin Figure 4B. The multivalent fluorescent beads spread and had a rounded morphology Figure 4B. Extensive EMR2 ligand-positive staining was also observed within the EMR2 binds to cell-surface proteoglycans mucosa, submucosa, and adventitia of mouse esophagus Figure 3C. Figure 3B,D shows adjacent sections stained with hematoxylin and eosin for comparison. The flow cytometric data and tissue distribution strongly implied that the ECM is isoforms and mouse Fc probe alone were used as staining controls known to be composed of 3 major components: Within all the tissues tested, the Table 2. A Graph showing the effects of EMR2 protein concentration on cell attachment. Cells spread when incubated with fibronectin for 60 minutes. As a consequence, PgsB has a much reduced expression of glycosyl transferase, which results in N-linked sugar biosynthesis GAGs on the cell surface. EMR2 specifically binds to sulphated CS side chains. Proteoglycans are known to contain heterogeneous GAG subtypes with differential chain-length and different degrees of sulphation and epimerization. Chondroitinase AC treatment partially reduces the binding of probes. The sulphation of sugar moieties has been shown to be crucial for ligand specificity and binding in many protein-GAG interactions. As with chondroitinase B digestion, this treatment completely abolished binding Figure 5D. On the other hand, cells cultured in the presence of sodium Figure 5. Dissection of the EMR2 ligand. The experiments were performed 3 times with similar results. Efficient blocking was effect, even at high concentrations. Note that the blocking effect is dose dependent. The figure is a representative of 3 the binding of EMR2 probes to cells is mediated predominantly by independent experiments with similar results. Surprisingly, however, all the fate. The presence of CS protein modules such as short consensus repeats SCR of the side chains on syndecan molecules has been previously re-complement control proteins as demonstrated by the CDCD55 ported<sup>36,37</sup>; however, it is not known whether glypican 1 can carry interaction. To confirm that the interaction between the important in maintaining the conformational rigidity and binding ARH transfectants and EMR2 probes is indeed mediated by CS, surfaces of cbEFG-like domains. As or CS-A blocked the binding of probes to cells data not shown. Moreover, the identification of dual ligands CD55 and CS for different CD97 receptor isoforms Discussion indicates that differential splicing of the same gene can allow the binding of different cellular ligands. Although the hormones, cytokines, peptides, amino acid derivatives, ions, neuro-functional significance of such a disparity is unknown, it can transmitters, and sensory stimuli such as photons, taste, and possibly be explained by the fact that CS side chain ligands are odorants. These results have protein-protein interaction mediated by the majority of leukocyte further confirmed the cellular adhesion function of the EGF-TM7 cell-surface receptors. Many other LNB-TM7 molecules are also thought to be of similar characterization based on the following observation. Second, the blocking effect by exogenous GAGs required facilitate ligand identification and shed light on the physiologic relatively high concentration Figure 5E. The enzymatic digestion roles of these intriguing cell-surface receptors. Although the syndecan molecules have been shown to analysis of stably transfected ARH cells probed with EMR2 multivalent fluorescent beads. B Enzymatic digestion of has not been demonstrated for the glypicans. The figure is a representative of 3 independent experiments with similar results. The epimerization From bloodjournal. Finally, Decorin, ing complex subregional heterogeneity. On the other pro- or anti-tumor effects. The authors would like to thank Liz Darley for the excellent CSPGs are also important during cholesterol deposition and technical support for tissue histology. Dr Phil Taylor is thanked for foam-cell formation in atherogenesis. A single mu-family of seven-transmembrane-region leukocyte subfamily. Express-ferase and glucuronosyltransferase activities in a Proc Natl Acad Sci unusual structures at the leukocyte surface. Chinese hamster ovary cells TM7, a group of seven-transmembrane proteins Family-B G-protein-coupled recep-; The seven span transmembrane receptor Stanley P, Chaney W. Control of carbohydrate 5. Heparan sulfate pro-lis AC, Gordon S. Identification specific interaction with the murine decay-accel-optimal syndecan-1 function. Use of peptide libraries to map the Molecular cloning and zyme: Biotechnology ecle on chromosome 19p Characterization of the novel epidermal growth factor EGF -TM7 mole- assay for detecting low-affinity interactions at the CD55 DAF-binding site on the seven-span cule up-regulated in activated mouse macro-cell surface reveals no additional

## **DOWNLOAD PDF ISOLATION AND CULTURE OF MURINE MACROPHAGES JOHN Q. DAVIES AND SIAMON GORDON**

ligands for the transmembrane receptor CD The cys- cell surface heparan sulfate proteoglycans. Human epidermal growth factor EGF cell adhesion through syndecans and triggers Prydz K, Dalen KT. Synthesis and sorting of pro- signaling events that lead to beta1 integrin- module-containing mucin-like hormone receptor 3 teoglycans.

# DOWNLOAD PDF ISOLATION AND CULTURE OF MURINE MACROPHAGES JOHN Q. DAVIES AND SIAMON GORDON

## Chapter 2 : Publications Authored by Simon Yona | PubFacts

*This chapter describes established methods for the isolation and in vitro propagation of primary murine macrophages from various sites. Macrophages (Mφ) are central players in both the innate and adaptive immune systems and are attractive cells to study in culture because of their wide range of cellular functions.*

We also demonstrate that EMR2 receptor alternative splicing and glycosylation is regulated during myeloid differentiation. In addition to heterogeneous in vivo [1,2]. However, the expression of EMR2 in primary myeloid cells decreases after they take up antigens in cell culture. Myeloid cells become migrating DCs. For the de-glycosylation experiment, we used a series of oligosaccharidase enzymes [8,9]. Apart from Western blot analysis, we performed Northern blot analysis. Afterwards, cells were analyzed on FACSscan. Data were collected and analyzed using CellQuest software. An isotype-matched irrelevant mAb was used as a negative control, which the same chondroitin sulphate CS glycosaminoglycan consistently resulted in no staining. Tissues were subsequently counter-stained with DAPI, while only the shorter CD97 isoform was stained with hematoxylin. In addition to functional diversity, the expression patterns of the two receptors are also dissimilar. General chemicals were obtained from Sigma Dorset, UK. We therefore compared the sizes of EMR2 isoforms, which were readily detected in treated cells. This size spectrum matched those of Fig. 1. In stages of myeloid cells and that this is mostly regulated at addition, EMR2 was expected to be a heavily glycosylated protein. Indeed, in primary myeloid cells, EMR2 expression was expected to be a heavily glycosylated protein. Indeed, RNA transcripts [16]. Taken together, this suggests that EMR2 expression is regulated in primary myeloid cells. Tissue biopsies from liver abscess A, lung abscess B, and acute suppurative appendicitis C were stained with 2A1. However, EMR2-negative neutrophils (indicated by a broken black arrow) were also observed. An isotype control Ab did not produce any staining (data not shown). As only the largest EMR2 isoform is known to internalize via clathrin-mediated pathways. Lin, Medical Research G. Supplementary data [12] J. Supplementary data associated with this article can be found in the online version, at doi: 10.1016/j.immgen.2003.08.001 [13] M. Gordon, found, in the online version, at doi: 10.1016/j.immgen.2003.08.001 [14] M. Gordon, Macrophage receptors and immune recognition, J. Taylor, Monocyte and macrophage heterogeneity, antigen CD97, a new seven-span transmembrane molecule of the Nat. McKnight, Human EMR2, Molecular analysis of transmembrane 7 hormone receptor family, J. Gordon, Surface properties of EMR2

# DOWNLOAD PDF ISOLATION AND CULTURE OF MURINE MACROPHAGES JOHN Q. DAVIES AND SIAMON GORDON

## Chapter 3 : Papers with the keyword calf peritonitis (Page 2) | Read by QxMD

7 \_ *Isolation and Culture of Murine Macrophages John Q. Davies and Siamon Gordon Summary* The two most convenient sources of primary murine macrophages are the bone marrow and the peritoneal cavity.

An ex vivo or in vitro monocyte, monocyte derived cell or macrophage infected with an oncolytic herpes simplex virus. The ex vivo or in vitro monocyte, monocyte derived cell or macrophage of claim 1 wherein the cell contains an exogenous magnetic material. A preparation comprising a population of monocytes, monocyte derived cells or macrophages infected with an oncolytic herpes simplex virus. A preparation according to claim 3, wherein the monocytes, monocyte derived cells or macrophages contain an exogenous magnetic material. A preparation according to claim 3 or 4 for use in a method of medical treatment. A method of preparing a monocyte, monocyte derived cell or macrophage infected with an oncolytic herpes simplex virus, the method comprising contacting in vitro a monocyte, monocyte derived cell or macrophage with an oncolytic herpes simplex virus. The method of claim 6, wherein the method further comprises contacting the monocyte, monocyte derived cell or macrophage with a magnetic material. A method of producing a preparation comprising a population of monocytes, monocyte derived cells or macrophages infected with an oncolytic herpes simplex virus, the method comprising providing a population of monocytes, monocyte derived cells or macrophages infected with an oncolytic herpes simplex virus, and formulating a preparation comprising said population of cells. The method of claim 8, wherein the monocytes, monocyte derived cells or macrophages in said population contain an exogenous magnetic material. A monocyte, monocyte derived cell or macrophage infected with an oncolytic herpes simplex virus, and optionally containing an exogenous magnetic material, for use in a method of treatment of disease. Use of a monocyte, monocyte derived cell or macrophage infected with an oncolytic herpes simplex virus, and optionally containing an exogenous magnetic material, in the manufacture of a medicament for use in the treatment of disease. The monocyte, monocyte derived cell or macrophage for use in a method of treatment of disease of claim 10, preparation for use in a method of treatment of disease of claim 12, or use of claim 11 or 13, wherein the disease is cancer. A method of treating a disease in a subject in need of treatment, the method comprising administering a preparation comprising a population of monocytes, monocyte derived cells or macrophages infected with an oncolytic herpes simplex virus to said subject, thereby treating said disease. The method of claim 15 wherein the monocytes, monocyte derived cells or macrophages in said population contain an exogenous magnetic material. The method of any one of claims 15 to 17 wherein the disease is cancer. A kit of parts comprising a predetermined amount of oncolytic Herpes Simplex Virus and a predetermined amount of a magnetic material. Resistance to treatments is generally acquired when tumor mass presents areas which are not reached or affected by conventional therapies, i. These regions are located at the centre of the tumor bulk and are generally characterised by a highly hypoxic environment, meaning that the oxygen supply is insufficient for the appropriate respiration of cells and stroma Shannon, A. Toomey, Tumour hypoxia, chemotherapeutic resistance and hypoxia-related therapies. *Cancer Treatment Reviews* The hypoxic condition, which is an invariable characteristic of solid tumors, develops because the rate of cell replication in tumors overcomes that of vessel formation: In turn, angiogenesis leads to the generation of structurally disordered blood vessels with improper distribution within the cancer mass Kandel, J. Kitajewski, Angiogenesis in Tumour Development and Metastasis, pp. Hoeckel, Treatment resistance of solid tumors—Role of hypoxia and anemia. Ultimately, this creates a feedback loop which further increases hypoxia. An important feature of hypoxic areas of cancers is the marked presence of immune cells, which infiltrate into the tumor mass since the very early stages of cancer onset Di Caro, G. Grizzi, Immune cells: *Journal of Cellular and Molecular Medicine* Among the most studied cell types are tumor-associated macrophages TAMs. TAMs are a population of macrophages that mobilise and accumulate in great number in the hypoxic central areas of solid tumors Turner, L. Balkwill, Hypoxia inhibits macrophage migration. *European Journal of Immunology* Lewis, Expression of vascular

## DOWNLOAD PDF ISOLATION AND CULTURE OF MURINE MACROPHAGES JOHN Q. DAVIES AND SIAMON GORDON

endothelial growth factor by macrophages is up-regulated in poorly vascularized areas of breast carcinomas. *Journal of Pathology* American Journal of Cancer Research 3: TAMs are characterised by a specific phenotype, activated in response to micro-environmental signals such as cytokines, growth factors and hormones Martinez, F. Mantovani, Transcriptional profiling of the human monocyte-to-macrophage differentiation and polarization: New molecules and patterns of gene expression. *Journal of Immunology* While their counterparts, M1-polarised macrophages, are activated in response to inflammatory molecules and are characterised by high anti-tumor and immuno-stimulatory functions, the M2-skewed macrophages express marked pro-tumor activities, suppressing inflammatory processes and promoting matrix remodelling, invasion, angiogenesis and survival Sica, A. Allavena, Tumour-associated macrophages are a distinct M2 polarised population promoting tumour progression: Potential targets of anti-cancer therapy. *European Journal of Cancer* American Journal of Pathology *Annals of Medicine* Cancer Immunology Immunotherapy However, their specific accumulation into hypoxic regions of tumors is fostered by several features: Yoshida, Hypoxia reduces constitutive and TNF-alpha-induced expression of monocyte chemoattractant protein-1 in human proximal renal tubular cells. *Biochemical and Biophysical Research Communications* Balkwill, Endothelin-2 is a hypoxia-induced autocrine survival factor for breast tumor cells. *Molecular Cancer Therapeutics* 1: Once amassed into hypoxic areas, TAMs respond to oxygen-depleted conditions through an increase in production and release of several factors, such as growth factors, MMPs and CXCLs, which in turn affect angiogenesis, cellular growth, invasive capabilities and metastasis: Given their pivotal role in triggering cancer progression, infiltration of TAMs in tumors has been correlated with poor prognosis in the majority of solid cancers: The double-edged sword in cancer progression. *Journal of Clinical Oncology* BioMed research international *Annals of Surgical Oncology* Oncolytic virotherapy concerns the use of lytic viruses which selectively infect and kill cancer cells. Some oncolytic viruses are promising therapies as they display exquisite selection for replication in cancer cells and their self-limiting propagation within tumors results in fewer toxic side effects. Several oncolytic viruses have shown great promise in the clinic Bell, J. An Approved Product on the Horizon? Macrophages are known to have a natural homing ability to a site of disease and have been proposed as cellular vehicles for gene therapy Burke et al. *Journal of Leukocyte Biology* Vol. The cells are described to be useful as a vehicle for targeting a therapeutic agent to a diseased material in a subject, where the therapeutic agent may preferably be a gene i. Related work is disclosed in Muthana et al. A novel magnetic approach to enhance the efficacy of cell-based gene therapies. *Gene Therapy* 15, *Cancer Res*; 71 5 Mar. Induction of replication of adenovirus did not lead to death of the macrophages. In Muthana et al. *Cancer Res*; 73 2 Jan. The infected monocyte, monocyte derived cell or macrophage is disclosed to be useful in a method of treatment of disease, in particular the treatment of cancer. Preferred treatments may include treatment of a tissue or cancer that is hypoxic or a part of a tissue or cancer that is hypoxic. Preferred treatments may include treatment of a tissue or cancer located in deep tissues, organs or in the core of the body. The infected cell represents a specialised vector which is self-targeting to diseased tissue, thereby delivering the oncolytic Herpes Simplex Virus directly to the diseased tissue, including to hypoxic regions of tissue which are otherwise very difficult to penetrate with therapeutic agents. The cells do not act merely as a vector. Oncolytic Herpes Simplex Virus infection leads to death of the monocyte or monocyte derived cells, which may be caused by viral replication and cell lysis. Cell death whilst present in the diseased tissue therefore leads to release of oncolytic Herpes Simplex Virus and direct delivery to the diseased cells, e. Furthermore, the oncolytic Herpes Simplex Virus initiates an enhanced immune response in hypoxic tissue, thereby promoting an immune response to the disease, e. In some embodiments the monocyte, monocyte derived cell or macrophage may also contain an exogenous magnetic material. In one aspect of the present invention an ex vivo or in vitro monocyte, monocyte derived cell or macrophage infected with an oncolytic herpes simplex virus is provided. In some embodiments the ex vivo or in vitro monocyte, monocyte derived cell or macrophage may also contain an exogenous magnetic material. In one aspect of the present invention a preparation comprising a population of monocytes, monocyte derived cells or macrophages infected with an

## DOWNLOAD PDF ISOLATION AND CULTURE OF MURINE MACROPHAGES JOHN Q. DAVIES AND SIAMON GORDON

oncolytic herpes simplex virus is provided. In one embodiment the monocytes, monocyte derived cells or macrophages also contain an exogenous magnetic material. In one aspect of the present invention, the preparation is provided for use in a method of medical treatment, e. In another aspect of the present invention a method of preparing a monocyte, monocyte derived cell or macrophage infected with an oncolytic herpes simplex virus is provided, the method comprising contacting in vitro a monocyte, monocyte derived cell or macrophage with an oncolytic herpes simplex virus. In some embodiments the method further comprises contacting the monocyte, monocyte derived cell or macrophage with a magnetic material. In another aspect of the present invention a method of producing a preparation comprising a population of monocytes, monocyte derived cells or macrophages infected with an oncolytic herpes simplex virus is provided, the method comprising providing a population of monocytes, monocyte derived cells or macrophages infected with an oncolytic herpes simplex virus, and formulating a preparation comprising said population of cells. In some embodiments, monocytes, monocyte derived cells or macrophages in said population contain an exogenous magnetic material. In another aspect of the present invention a monocyte, monocyte derived cell or macrophage infected with an oncolytic herpes simplex virus, and optionally containing an exogenous magnetic material, is provided for use in a method of treatment of disease. In another aspect of the present invention the use of a monocyte, monocyte derived cell or macrophage infected with an oncolytic herpes simplex virus, and optionally containing an exogenous magnetic material, in the manufacture of a medicament for use in the treatment of disease is provided. In another aspect of the present invention a method of treating a disease in a subject in need of treatment is provided, the method comprising administering a preparation comprising a population of monocytes, monocyte derived cells or macrophages infected with an oncolytic herpes simplex virus to said subject, thereby treating said disease. In another aspect of the present invention a kit of parts is provided, the kit comprising a predetermined amount of oncolytic Herpes Simplex Virus and a predetermined amount of a magnetic material. In some embodiments all copies of the ICP As such the oncolytic herpes simplex virus may be an ICP In some embodiments one or both of the ICP In some embodiments the oncolytic herpes simplex virus is a mutant of HSV-1 strain In some embodiments the herpes simplex virus is a mutant of HSV-1 strain 17 mutant In some embodiments the disease to be treated is a cancer, e.

# DOWNLOAD PDF ISOLATION AND CULTURE OF MURINE MACROPHAGES JOHN Q. DAVIES AND SIAMON GORDON

## Chapter 4 : - NLM Catalog Result

*Isolation and Culture of Murine Macrophages Davies, John Q.; Gordon, Siamon The two most convenient sources of primary murine macrophages are the bone marrow and the peritoneal cavity. Resident peritoneal macrophages can readily be harvested from mice and purified by adherence to tissue culture plastic.*

Simultaneously, she had watery diarrhoea and abdominal pain associated with a bad general condition and fever. Skin examination showed ulcerated lesions with a non infiltrated inflammatory bader of the left food and the right calf associated with an abscess of the left forearm Twenty-four hours later, the macrophages were infected with Leishmania amastigotes in culture medium Journal of Infection <https://doi.org/10.1093/infdis/jaa001>: The atherosclerosis formation was induced by hyperlipidemic diet in quails. At the 9th week, serum lipid, MDA and NO were measured, and HE staining was used to investigate the histopathological changes of aorta. Bovine aortic endothelial cells EC were obtained from the thoracic aorta of newborn calves. After incubation of the cells with Ox-LDL 50 mg x L<sup>-1</sup> for 24 h, the activities of LDH, NO in culture media and activity of NOS in endothelial cells were measured, flow cytometer was used to determine the rate of endothelial cells apoptosis The prompt haemodynamic response to carbon dioxide insufflation during laparoscopic cholecystectomy suggests involvement of the sympathetic system. The aim of the present study was to examine if a change in vascular resistance in leg skeletal muscle could be an important mechanism behind the increased afterload. Furthermore, the arterio-venous differences of the catecholamines were measured in the leg before and during insufflation of carbon dioxide into the peritoneal cavity Acta Anaesthesiologica Scandinavica <https://doi.org/10.1111/acta.13888>: Fifteen cannulae remained in situ from day 3 to 34 of life mean: Calves were clinically healthy and gained weight during the study Journal of Veterinary Medicine. A, Physiology, Pathology, Clinical Medicine <https://doi.org/10.1111/jvms.12111>: In the present study, we examined whether endocytosis and subsequent acidification are associated with these responses. Journal of Leukocyte Biology <https://doi.org/10.1189/jlb.1114001>: John Q Davies, Siamon Gordon The two most convenient sources of primary murine macrophages are the bone marrow and the peritoneal cavity. Resident peritoneal macrophages can readily be harvested from mice and purified by adherence to tissue culture plastic. The injection of Bio-Gel polyacrylamide beads or thioglycollate broth into the peritoneal cavity produces an inflammatory response allowing the purification of large numbers of elicited macrophages. The production of an activated macrophage population can be achieved by using Bacillus-Calmette-Guerin as the inflammatory stimulus

## Chapter 5 : Oncolytic Herpes Simplex Virus Infected Cells - VIRTU BIOLOGICS LIMITED

*Isolation and culture of murine macrophages February 2014. Methods in Molecular Biology The two most convenient sources of primary murine macrophages are the bone marrow and the peritoneal cavity.*

## Chapter 6 : Publications Authored by John Q Davies | PubFacts

8 \_ *Isolation and Culture of Human Macrophages John Q. Davies and Siamon Gordon Summary Methods to isolate and culture human monocyte-derived macrophages and alveolar macrophages are described.*

## Chapter 7 : Table of contents for Library of Congress control number

*John Q Davies Hsi-Hsien Lin Martin Stacey Simon Yona Gin-Wen Chang Siamon Gordon Jörg Hamann Leticia Campo Cheng Han Peter Chan Stephen B Fox Oncol Rep Mar 21;25(3) Epub Dec*

## Chapter 8 : CiNii 10.1111/j.1365-3113.2012.04836.x - Basic cell culture protocols

**DOWNLOAD PDF ISOLATION AND CULTURE OF MURINE  
MACROPHAGES JOHN Q. DAVIES AND SIAMON GORDON**

*Isolation and Culture of Human Macrophages Isolation and Culture of Human Macrophages Davies, John Q.; Gordon, Siamon Methods to isolate and culture human monocyte-derived macrophages and alveolar macrophages are described.*