

Subject: Re: Containment Level request: Recombinant adenovirus
From: Geneviève Lacroix <genevieve_lacroix@phac-aspc.gc.ca>
Date: Mon, 17 Aug 2009 16:10:09 -0400
To: Jennifer Stanley <jstanle2@uwo.ca>

Dr. Dick
Aus protocol
(Item 5.1)

Hi Jennifer,

Containment level 2 for sure as the wild-type adenovirus is a risk group 2. I am not too worried about the transgene as CRE is not an oncogene or tumor suppressor or cell cycle regulator.

I don't think that containment level 3 operational practices are required (although the University can decide to implement them). I would however, make sure that the following practices are followed:
I would make sure that appropriate PPE are worn, especially that we are discussing aerosol challenges. I would recommend all work to be carried in a Class 2 BSC. Also make sure that the infected animals are not in proximity to non-infected animals. You might want to keep the cages in a different room or use HEPA filtered cages. Make sure to address the issue of shedding and to discard the animal bedding appropriately.

If you need further assistance, let me know.

Genevieve Lacroix, M.Sc.
A/Head, Importation and Biosafety Programs
Chef intérimaire/Importation et service de biosécurité
Office of Laboratory Security / Bureau de la sécurité des laboratoires
Public Health Agency of Canada / Agence de la santé publique du Canada
100 ch. Colonnade Rd. AL: 6201A, Ottawa, Ontario, Canada, K1A 0K9
Tel: (613) 946-6982
Fax: (613) 941-0596
genevieve_lacroix@phac-aspc.gc.ca
<http://www.phac-aspc.gc.ca/ols-bsl/index.html>

Jennifer Stanley <jstanle2@uwo.ca>
2009-08-17 03:42 PM

To
Geneviève Lacroix <genevieve_lacroix@phac-aspc.gc.ca>
cc

Subject
Re: Containment Level request: Recombinant adenovirus

Hi Genevieve
So what containment level do you recommend? It must be at least Level 2..Level 2 plus? Level 3?
Jennifer

Geneviève Lacroix wrote:
Hi Jennifer,

It sounds good to me. I would however make sure that the issue of shedding

is be addressed, and therefore proper disposal of cage bedding.

Let me know if I can further assist.

Genevieve Lacroix, M.Sc.

A/Head, Importation and Biosafety Programs

Chef intérimaire/Importation et service de biosécurité

Office of Laboratory Security / Bureau de la sécurité des laboratoires

Public Health Agency of Canada / Agence de la santé publique du Canada

100 ch. Colonnade Rd. AL: 6201A, Ottawa, Ontario, Canada, K1A 0K9

Tel: (613) 946-6982

Fax: (613) 941-0596

genevieve.lacroix@phac-aspc.gc.ca

<http://www.phac-aspc.gc.ca/ols-bsl/index.html>

Jennifer Stanley <jjstanle2@uwo.ca>

2009-08-09 08:54 PM

To

genevieve.lacroix@phac-aspc.gc.ca

cc

Subject

Containment Level request: Recombinant adenovirus

Hello there

I am wondering if you can give me your opinion on the containment

required

for the project described below.

Thanks

Jennifer

"Mice carrying a lox-stop-lox-RasG12D allele (called Kras tm4tyj) are anesthetized, allowed to inhale a solution containing adenovirus-Cre, allowed to recover and monitored for cancer incidence. Inhaled virus infects lung epithelium and expresses Cre. Cre then deletes the lox-stop-lox and oncogenic Ras is expressed in the infected cell. Some of these cells develop into tumors. More details can be found at the following web site

http://web.mit.edu/jacks-lab/NP_Jacks.pdf "

"Since animals are being infected with a hazardous agent (recombinant adenovirus), mice will be housed in individual vented cages in the special inclusion barrier. Mice will be infected only in a BL2 rated safety cabinet, and cages will only be changed and mice will only be inspected inside a BL2 cabinet."

"Virus will be delivered intranasally. In brief, the anesthetized mouse will be held on its back with its head elevated. The viral solution will be slowly expelled from a pipette tip over one nostril, so that it can be inhaled. See http://web.mit.edu/jacks-lab/NP_Jacks.pdf for more details."

Resulting Changes: "Mouse cells that are infected with recombinant adenovirus-Cre will express Cre recombinase and DNA sequences between

LoxP sites in these cells will be deleted as a result. Control mice will be infected with recombinant adenovirus-GFP that will express green fluorescent protein"

----- Original Message -----

Subject:RE: Viral Vector Policy and Dick Protocol

Date:Wed, 05 Aug 2009 12:35:21 -0400

From:dekaban <dekaban@robarts.ca>

To:Jennifer Stanley <jstanle2@uwo.ca>

CC:Gerald M Kidder <gmk@uwo.ca>

References:<4A79AF51.4020802@uwo.ca>

Hi Jennifer,

This is a virus carrying an active oncogene based on what I understand. It is to be used in a form that will result in potential aerosols. At a minimum this should be a level 3 experiment. I would go to health Canada on this one. It is the worst possible type of experiment for us to consider. In fact since our level 3 does not support aerosol containment experiments we may not be allowed to do this experiment.

Greg