

Risk Assessment: HAP1 cells for RNA extraction

Scope

This Risk assessment refers to the HAP1 cells features and cell pellet preparation for RNA extraction. The tissue culture and RNA extraction work will be held at the Target Discovery Institute, Oxford and the cell pellet will be then transferred in dry ice to the Medical Research Council, Harwell, Didcot for RT-PCR and Real time PCR experiment.

Features of HAP1 cells and preparation of cell pellet for RNA extraction are described below:

- HAP1 is a near-haploid human cell line that was derived from the male chronic myelogenous leukemia (CML) cell line KBM-7. HAP1 cells are adherent with fibroblast-like morphology.
- HAP1 cells are grown in Iscove's Modified Dulbecco's Medium (IMDM) in the presence of 10% fetal calf serum and penicillin/ streptomycin. Cells are passaged every 48h at a dilution of 1:10 or 1:20, depending on the initial density.
- For RNA extraction with Qiagen kit, HAP1 cells are washed twice in PBS cold, and then the RNA extraction will be performed directly in the vessel following the kit's procedure. Alternatively, after washing the cells twice with PBS cold, cells can be harvested in PBS cold as a pellet in an eppendorf tube and store them at -80C. The cells pellet can be transported in dry ice (a separate sheet regarding to the "Transport of Research Material" will be attached)

Name of assessor:	Stefania Militi	Date of Assessment:	March 2016	Review Date:	Every 3 years
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Risk Matrix:

Risk Matrix		Likelihood			
		High	Medium	Low	Negligible
Consequence	Severe	High	High	Medium	Effectively Zero
	Moderate	High	Medium	Medium/low	Effectively Zero
	Insignificant	Medium/Low	Low	Low	Effectively Zero
	Negligible	Effectively Zero	Effectively Zero	Effectively Zero	Effectively Zero

Risk Assessment:

Hazard (Cause and consequence)	Affected Groups	Existing controls	Risk	Further Action
Handling of cell pellet and use of centrifuge. Manual handling risk	Staff and collaborators	Use correct manual handling techniques and training See the following documents for further information <ul style="list-style-type: none"> • TDI-RA-003 Safe use of centrifuges • TDI-RA-012 Manual handling of rotors for the floor standing centrifuge • TDI-SOP-007 Handling of biological material • TDI-SOP-009 Use of laboratory centrifuges 	Low	None

Signed By Author:

Approved by (sign and print):

Reviewed by:

Review date: