

EPL Core Services Request Form

Other Services

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Date: 05/29/2015

All Request Must Be Reviewed With SM Hewitt

IHC Assay Development

In Situ Assay

XXX DNA (FISH) ***prefer CISH assay***

RNA

Tissue Microarray

0.6-2.00 mm core

Laser Capture Microdissection

Pixel II

Veritas,

XT

XMD

Briefly describe needs, including number of samples and deliverables.

My research section has developed a xenograft model of rhabdomyosarcoma in which human male myoblasts (transduced with various oncogenes) are injected into the muscle of female mice. As one of the oncogenes can be inducibly expressed using the Tet-On system, tumor formation can be induced by doxycycline treatment and repressed by doxycycline withdrawal. In the regressing tumors, there is prominent myogenic differentiation in the form of giant cell formation and eventual differentiated myocyte formation. To verify that these findings are occurring in the tumor cells and not in the mouse muscle, an ISH assay that distinguishes the human and mouse cells would be a very useful approach. Furthermore, to visualize these findings on the overall histologic pattern, a CISH approach would be optimal. In the context of this experiment, this assay could use human-specific DNA (e.g. Alu elements) or a Y-chromosome-specific probe. For the present experiment, such a probe would be applied to approximately 10-20 slides; however, this probe would be used in subsequent experiments with this xenograft system. In addition, this approach would be useful to other investigators working with human xenografts in mice.

5/29/15 - to discuss optimal design. Consider tool high value.

6/8/15 - ACD confirm will build probes - plan B1 (mouse) Alu (human)

Reviewed: ____ / ____

Estimated Date of Completion: _____

Notes:

Date of Completion: _____

EPL-O__ - ____