

Coming soon HCI-040-EI PDX

Catalogue number: 162106

Tool type:

Contributor

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Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: Coming soon HCI-040-EI PDX

Alternate name:

Class:

Conjugate:

Description: Please register your interest through the enquiry button (quote not currently available)

Human breast cancer-derived xenograft that retains high fidelity to original tumour and provides valuable resources for drug discovery and precision oncology. This panel of Patient Derived Xenografts provide models for some of the deadliest forms of breast cancer including drug-resistant, metastatic tumours, and endocrine-resistant estrogen receptor-positive (ER+) and HER2+ tumours. Sample taken from same donor as HCI-040 in 2017 from femur met of Caucasian female, age 73 at time of collection with a primary diagnosis of right IDC;2006. Patient had no history of smoking and experienced clinical metastasis in the lung and femur. It's unknown if patient had undergone radiation therapy prior to sample collection, but patient had received systemic treatment with tamoxifen 2007; anastrozole 2007; letrozole 2015; tamoxifen 2017; fulvestrant 2017 prior to sample collection. Patient and PDX characteristics were as follows - ER status: positive, PR status: positive, HER2 status: positive. PDX information: PDX engrafted in Sept 2019 from HCI-040 in OVX mice. Not estrogen dependent and no hotspot ESR1 mutation detected. PAM50 subtype not done and tests to detect metastasis not done

Purpose:

Parental cell:

Organism:

Tissue:

Model:

Gender: Female

Isotype:

Reactivity:

Selectivity:

Host:

Immunogen:

Immunogen UNIPROT ID:

Sequence:

Growth properties:

Production details: Fresh or thawed human breast tumour fragments were implanted into the cleared inguinal mammary fat pad of female Immune-compromised mice. For bone metastasis samples, bone fragments were coimplanted. For liquid specimens, pleural effusion, or ascites fluid, 1-2 million cells were injected into cleared mammary fat pads in Matrigel. For ER+ tumours, mice were dosed with E2 beeswax pellets and given supplemental E2 via drinking water. When tumours reached 1-2 cm in diameter, tumours were aseptically collected and reimplanted into new mice or banked. Estrogen-independent ER+ breast PDX models were generated when ER+ PDX tumours were transplanted into ovariectomized mice without E2 supplementation.

Formulation: Frozen explant from the xenografted tumour

Recommended controls:

Bacterial resistance:

Selectable markers:

Additional notes: Additional Information on PDX establishment:

<https://www.nature.com/articles/s43018-022-00337-6/figures/9>

Patient details

Cancer subtype:

Cancer stage/grade:

Biopsy site: Bone metastasis

Patient ethnicity: Caucasian

Treatment history: Pretreated: It's unknown if patient had undergone radiation therapy prior to sample collection, but patient had received systemic treatment with tamoxifen 2007; anastrozole 2007; letrozole 2015; tamoxifen 2017; fulvestrant 2017 prior to sample collection

Engraftment details

Mice passaged?: Yes

Engraftment site: Cleared mammary fat pad

Sample type: HCI-040 PDX Tissue Fragment

Host strain: Immunocompromised mice NOD scid gamma (NSG) Jackson Laboratory 5557; NOD/scid, Jackson Laboratory 1303 or NOD rag gamma (NRG), Jackson Laboratory 7799

Histology:

Genetic data: Whole exome sequencing, SNP array, CNV data and RNA sequence from Guillen et al. 2022 Nature Cancer, is available in NIH database dbGaP under accession number phs002479.v1.p1

Target details

Target:
Target alternate names:
Target background:
Molecular weight:
Ic50:

Applications

Application:
Application notes:

Handling

Format: Frozen explant from the xenografted tumour
Concentration:
Passage number:
Growth medium:
Temperature:
Atmosphere:
Volume:
Storage medium:
Storage buffer:
Storage conditions:
Shipping conditions:

CancerTools.org

Related tools

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References

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