

ADENOID CYSTIC CARCINOMA CELL LINE VALIDATION CRITERIA

Necessary attributes for cell lines showing MYB gene alteration

1. A characteristic structural alteration or duplication involving the MYB gene or its flanking region.
2. Unique human genotype (standard STR analysis, test against database for other cell line contaminant).
3. Expression of markers of epithelial / myoepithelial lineage differentiation.

Necessary attributes for cell lines not showing MYB gene alteration

1. Matching genotype to a human tumor with unequivocal histologic and clinical features of ACC, or growth as a xenograft tumor with histologic features and/or gene expression signature characteristic of ACC.
2. Unique human genotype (standard STR analysis, test against database for other cell line contaminant).
3. Expression of markers of epithelial / myoepithelial lineage differentiation.

Highly desirable attributes

1. Expression of MYB comparable to levels in primary samples of ACC in at least one of the following conditions: cell culture, co-culture with stromal cells, xenograft growth.
2. Gene expression profiles that resemble those of primary tumors present in public databases.
3. Recapitulation of the histology of the parent human tumor when grown as xenografts in immunodeficient mice.
4. Spontaneous immortalization (not transfected with oncogenes, hTERT, etc.)

Other desirable attributes

1. Passage number tracking.
2. Growth in soft agar.
3. Growth as oncospheres.
4. Growth as a xenograft with histologic features of ACC.
5. Detection of somatic alterations in genes previously found in primary ACC tumors and/or in the parent human tumor.

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