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Datasheet for WM1361A-01-0001

WM1361A Viable Cells

Overview

Description:	WM1361A Viable Cells - WM1361A-01-0001
Item No.:	WM1361A-01-0001
Size:	1 million cells
Applications:	Cellular Assay, IF, IHC, WB
Origin:	Human

Product Details

Background:	WM1361A is a tumorigenic (VGP) primary melanoma cell line with competence for metastasis. These cells display mesenchymal morphology in culture. This cell line contains a Q61R mutation at position 61 in the N-RAS gene. The Q61R is the most common NRAS mutation found in melanoma that is thought to occur due to UV and radiation exposure. This mutation leads to production of a constitutively active N-RAS protein that directs cells to grow and divide constantly. This cell line also expresses PTEN loss of function including hemizygous PTEN deletion and is wild type for BRAF, c-KIT, and CDK4. WM1361A cells produce xenograft tumors when injected into immunocompromised mice.
Synonyms:	Melanoma, patient derived tumor, tumor models, skin cancer, xenograft
Species of Origin:	Human

Target Details

Purity/Specificity:	Cells are sterile, validated by short tandem repeat profiling, and are tested as negative for mycoplasma. It is recommended that cell lines are tested for mycoplasma contamination and short tandem repeat (STR) profiling every 10 passages or each time a frozen seed stock is made. See cell culture protocol for additional details.
Relevant Links:	• Cell Line EULA • Melanoma Cell Culture Protocol

Application Details

Suggested Applications:	Cellular Assay, IF, IHC, WB (Based on references)

Application Note:	The key applications of these cell lines include genetic studies, xenograft production, drug testing, and drug target discovery. These cell line models can be used in various biological assays, and for identifying critical target genes, and cell signaling pathways.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

Cell Line Data

Cell Line:	Human Melanoma
Product Type:	Viable Cells
Morphology:	small mesenchymal
Cell Viability:	Yes
Stage:	VGP
BRAF:	WT
CDK4:	WT
C-Kit:	WT
N-RAS:	Q61R Homozygous
PTEN:	Hemizygous Deletion
Paired:	No
Medium:	Tumor Specialized Media with 2% HI-FBS
Sub-culture:	Cells should be maintained between 30 – 95% confluence in tumor specialized medium with 2% FBS; split cultures 1:4 every 7 days using 0.25% trypsin/EDTA.
Incubation:	36°C with 5% CO2

Formulation

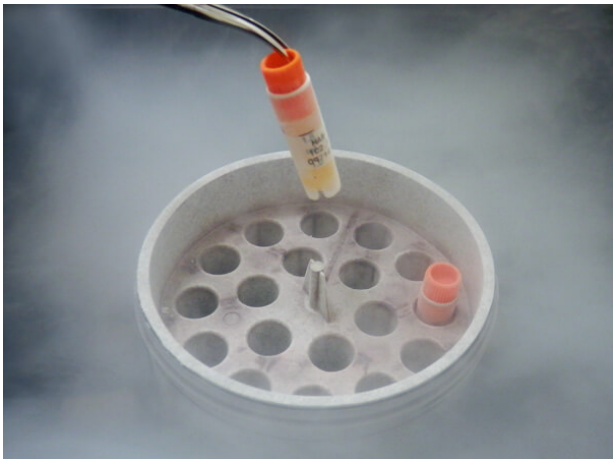
Physical State:	Frozen Cell Suspension
Concentration:	1.0 million cells/mL Count By Hemocytometer
Buffer:	None
Preservative:	None
Stabilizer:	None

Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	Cells are frozen with 90% FBS/10% DMSO solution at about 1x10^6 cells/ml. Store vial in liquid nitrogen upon arrival.
Expiration:	Expiration date is two (2) years from date of receipt.

Images

Viable cell growth
Established WM1361A viable cell growth in culture using appropriate Tumor Specialized Media with 2%FBS.



Flask
Human melanoma tumor cells with known gene mutations, disease stage, STR, and RPPA profiling

References

- Koroknai V et al. Expression pattern of osteopontin isoforms in malignant melanoma cell lines. *Clin Transl Sci.* (2024)
- Hanniford D et al. Epigenetic silencing of CDR1as drives IGF2BP3-mediated melanoma invasion and metastasis. *Cancer Cell.* (2021)
- Castro-Perez E et al. Melanoma Progression Inhibits Pluripotency and Differentiation of Melanoma-Derived iPSCs Produces Cells with Neural-like Mixed Dysplastic Phenotype. *Stem Cell Reports.* (2019)
- Yin C et al. Pharmacological targeting of STK19 inhibits oncogenic NRAS-driven melanomagenesis. *Cell.* (2019)

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