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Datasheet for WM278-01-0001

WM278 Viable Cells

Overview

Description:	WM278 Viable Cells - WM278-01-0001
Item No.:	WM278-01-0001
Size:	1 million cells
Applications:	Cellular Assay, IF, IHC, Other, WB
Origin:	Human

Product Details

Background:	WM278 is a tumorigenic (VGP) primary melanoma cell line with competence for metastasis. This cell line features the specific V600E (Val600Glu) mutation at codon 600 in the BRAF gene. This mutation causes constitutively active kinase activity and activation of MEK and ERK signaling pathway. This cell line also expresses PTEN loss of function including hemizygous PTEN deletion and is wild type for N-RAS, c-KIT, and CDK4. WM278 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:	• WM278 Viable Cells SDS • Cell Line EULA • Melanoma Cell Culture Protocol

Application Details

Suggested Applications:	Cellular Assay, IF, IHC, Other, 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
Cell Viability:	Yes
Stage:	VGP
BRAF:	V600E
CDK4:	WT
C-Kit:	WT
N-RAS:	WT
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 using 0.25% trypsin/EDTA.
Incubation:	36°C with 5% CO2

Formulation

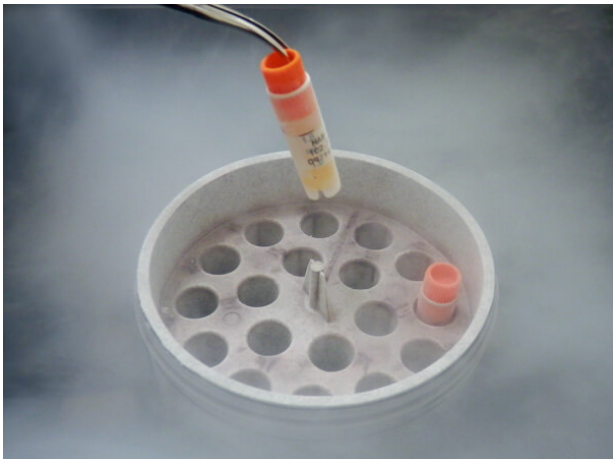
Physical State:	Frozen Cell Suspension
Concentration:	1.0 million cells/mL Count By Hemocytometer
Buffer:	None
Preservative:	None
Stabilizer:	None

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



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

Viable cell growth
Established WM278 viable cell growth in culture using appropriate Tumor Specialized Media with 2%FBS.

References

- Koroknai V et al. Expression pattern of osteopontin isoforms in malignant melanoma cell lines. *Clin Transl Sci.* (2024)
- Eriksson I et al. Lysosomal Function and Intracellular Position Determine the Malignant Phenotype in Malignant Melanoma. *J Invest Dermatol.* (2023)
- Eriksson I et al. Real-Time Monitoring of Lysosomal Membrane Permeabilization Using Acridine Orange. *Methods Protoc.* (2023)
- Hanniford D et al. Epigenetic silencing of CDR1as drives IGF2BP3-mediated melanoma invasion and metastasis. *Cancer Cell.* (2021)

Disclaimer

No test method can provide total assurance that the hepatitis B virus, hepatitis C virus, human immunodeficiency virus, or any other infectious agents are absent. Thus, all blood products, including purified proteins derived from human blood sources, should be handled at Biosafety Level 2 as recommended by the CDC\NIH manual entitled Biosafety in Microbiological and Biomedical Laboratories for potentially infectious human serum, blood specimens or proteins derived from same. Source material for the human blood product supplied to your facility has been tested for the detection of HIV antibody, Hepatitis B surface antigen, antibody to Hepatitis C, HIV 1 antigen(s), antibody to HTLV - I/II, and syphilis by FDA guidelines. All units were found to be non-reactive/negative for these tests. All human blood source material is collected in FDA licensed centers and is tested with FDA approved test kits.

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