

Datasheet for WM164-01-0001**WM164 Viable Cells****Overview**

Description:	WM164 Viable Cells - WM164-01-0001
Item No.:	WM164-01-0001
Size:	1 million cells
Applications:	Cellular Assay, ELISA, FC, WB
Origin:	Human

Product Details

Background:	WM164 is a metastatic human melanoma cell line established from a metastatic site (right upper arm) in a 22-year-old male with stage IV superficial spreading melanoma. WM164 cells produce xenograft tumors when injected into immunocompromised mice. 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 matches with 451Lu and 451Lu BR.
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, ELISA, FC, WB (Based on references)
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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:	Metastasis
BRAF:	V600E
CDK4:	WT
C-Kit:	WT
N-RAS:	WT
PTEN:	WT
Paired:	Yes
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 1:10 within < 1 week using 0.25% trypsin/EDTA.
Incubation:	36°C with 5% CO ₂

Formulation

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

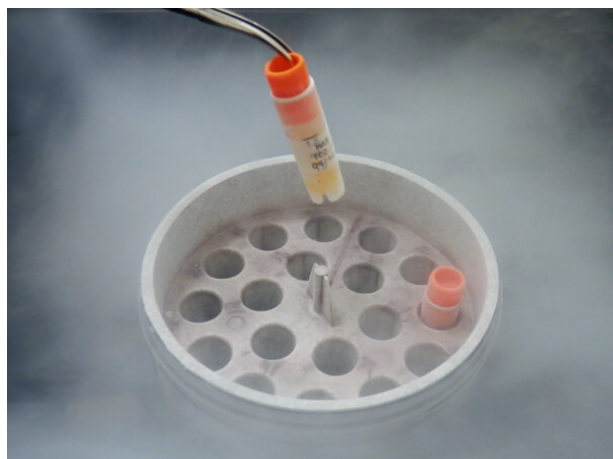
Shipping & Handling

Shipping Condition: Dry Ice

Storage Condition: Cells are frozen with 90% FBS/10% DMSO solution at about 1×10^6 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

References

- Eller S et al. Exploiting metabolic adaptations to overcome dabrafenib treatment resistance in melanoma cells. *Mol Oncol.* (2026)
- Oatman N et al. A Multimodal Drug-Diet-Immunotherapy Combination Restrains Melanoma Progression and Metastasis. *Cancer Res.* (2024)
- Webster MR et al. Paradoxical Role for Wild-Type p53 in Driving Therapy Resistance in Melanoma. *Mol Cell.* (2020)
- Didier R et al. Targeting the Proteasome-Associated Deubiquitinating Enzyme USP14 Impairs Melanoma Cell Survival and Overcomes Resistance to MAPK-Targeting Therapies. *Mol Cancer Ther.* (2018)

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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