Order online now!

www.rockland.com
tech@rockland.com
+1 484.791.3823

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 451lLu 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)

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% CO2

Formulation

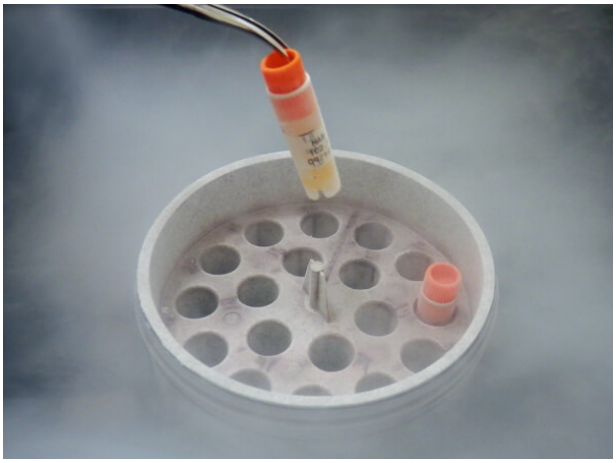
Physical State:	Frozen Cell Suspension
Concentration:	1.0 million cells/mL Count By Hemocytometer
Buffer:	None
Preservative:	None
Stabilizer:	None

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

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.

Cell Line Limited Use License Required. THIS PRODUCT IS SUBJECT TO AN END-USER LICENSE AGREEMENT (EULA). BY ACCEPTING THIS PRODUCT, RECIPIENT AGREES TO BE BOUND BY THE TERMS OF USE SET FORTH BELOW and SET FORTH IN THE EULA. THIS PRODUCT IS FOR IN VITRO RESEARCH USE ONLY. THERAPEUTIC, DIAGNOSTIC, OR VETERINARY USE IS PROHIBITED. This product may not be resold or transferred by the recipient and may be used only by the recipient, in the recipient's facility and only for research use and other uses specifically permitted by the EULA. No other commercial use is allowed. "Commercial Use" means any and all uses of this product by recipient or others for monetary or other consideration, including providing services, supplying information or data to unaffiliated third parties, and resale or transfer of this product for any use. Recipient has no right to modify, derivatize, genetically engineer or otherwise create variations of this product or associated cells or cell lines. ROCKLAND AND WISTAR MAKE NO REPRESENTATIONS AND EXTEND NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR THAT THE USE OF THE PRODUCTS WILL NOT INFRINGE ANY PATENT, COPYRIGHT, TRADEMARK, OR OTHER PROPRIETARY RIGHTS. The terms set forth herein and in the EULA shall be governed by the laws of the Commonwealth of Pennsylvania, USA. To obtain a COMMERCIAL USE license for this product, please contact Rockland Immunochemicals, Inc. Please contact a technical service representative for more information. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.