

## Datasheet for WM1341D-01-0001

# WM1341D Viable Cells

## Overview

<b>Description:</b>	WM1341D Viable Cells - WM1341D-01-0001
<b>Item No.:</b>	WM1341D-01-0001
<b>Size:</b>	1 million cells
<b>Applications:</b>	Cellular Assay, Functional Assay, IF, IHC, Multiplex, WB
<b>Origin:</b>	Human

## Product Details

<b>Background:</b>	WM1341D is a tumorigenic (VGP) primary melanoma cell line with competence for metastasis. These cells display epithelial square and triangular morphology in culture. This cell line features the specific V600R (Val600Arg) mutation at codon 600 in the BRAF gene. The V600R mutation results in an amino acid substitution at position 600 in BRAF, from a valine (V) to an arginine (R). This mutation occurs within the activation segment of the kinase domain. Mutations at V600 result in increased kinase activity and are transforming in vitro. WM1341D cells produce xenograft tumors when injected into immunocompromised mice.
<b>Synonyms:</b>	Melanoma, patient derived tumor, tumor models, skin cancer, xenograft
<b>Species of Origin:</b>	Human

## Target Details

<b>Purity/Specificity:</b>	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.
<b>Relevant Links:</b>	<ul style="list-style-type: none"><li><a href="#">Cell Line EULA</a></li><li><a href="#">Melanoma Cell Culture Protocol</a></li></ul>

## Application Details

<b>Suggested Applications:</b>	Cellular Assay, Functional Assay, IF, IHC, Multiplex, 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

<b>Cell Line:</b>	Human Melanoma
<b>Product Type:</b>	Viable Cells
<b>Morphology:</b>	epithelial square and triangle
<b>Cell Viability:</b>	Yes
<b>Stage:</b>	VGP
<b>BRAF:</b>	V600R
<b>CDK4:</b>	WT
<b>C-Kit:</b>	WT
<b>N-RAS:</b>	WT
<b>PTEN:</b>	WT
<b>Paired:</b>	No
<b>Medium:</b>	Tumor Specialized Media with 2% HI-FBS
<b>Sub-culture:</b>	Cells should be maintained between 30 – 95% confluence in tumor specialized medium with 2% FBS; split cultures 1:3 every 10 days using 0.25% trypsin/EDTA.
<b>Incubation:</b>	36°C with 5% CO <sub>2</sub>

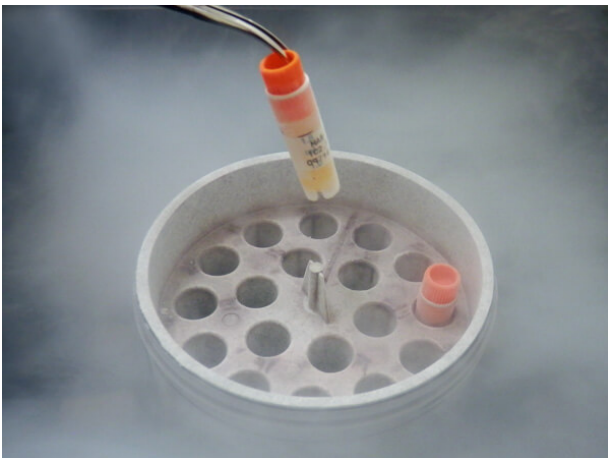
## Formulation

<b>Physical State:</b>	Frozen Cell Suspension
<b>Concentration:</b>	1x10 <sup>6</sup> Count By Hemocytometer
<b>Buffer:</b>	None
<b>Preservative:</b>	None
<b>Stabilizer:</b>	None

## Shipping & Handling

<b>Shipping Condition:</b>	Dry Ice
<b>Storage Condition:</b>	Cells are frozen with 90% FBS/10% DMSO solution at about $1 \times 10^6$ cells/ml. Store vial in liquid nitrogen upon arrival.
<b>Expiration:</b>	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 WM1341D viable cell growth in culture using appropriate Tumor Specialized Media with 2%FBS.

## References

- Wadzynska J et al. The impact of cellular elements of TME on melanoma biology and its sensitivity to EGFR and MET targeted therapy. *Biochim Biophys Acta Mol Cell Res.* (2023)
- Hippner M et al. Alpha-Enolase (ENO1) Correlates with Invasiveness of Cutaneous Melanoma—An In Vitro and a Clinical Study. *Diagnostics (Basel).* (2022)
- Makowiecka A et al. Changes in Biomechanical Properties of A375 Cells Due to the Silencing of TMSB4X Expression Are Not Directly Correlated with Alterations in Their Stemness Features. *Cells.* (2021)
- Kupczyk P et al. PARP1 as a Marker of an Aggressive Clinical Phenotype in Cutaneous Melanoma—A Clinical and an In Vitro Study. *Cells.* (2021)
- Malek N et al. The origin of the expressed retrotransposed gene ACTBL2 and its influence on human melanoma cells' motility and focal adhesion formation. *Sci Rep.* (2021)
- Malek N. et al. Knockout of ACTB and ACTG1 with CRISPR/Cas9(D10A) Technique Shows that Non-Muscle  $\beta$  and  $\gamma$  Actin Are Not Equal in Relation to Human Melanoma Cells' Motility and Focal Adhesion Formation. *Int J Mol Sci.* (2020)
- Makowiecka A et al. Thymosin  $\beta$ 4 regulates focal adhesion formation in human melanoma cells and affects their migration and invasion. *Front Cell Dev Biol.* (2019)
- Makowiecka A et al. Varying effects of EGF, HGF and TGF $\beta$  on formation of invadopodia and invasiveness of melanoma cell lines of different origin. *Eur J Histochem.* (2016)

## 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.