

**Datasheet for WM852-01-0001****WM852 Viable Cells****Overview**

|                      |                                    |
|----------------------|------------------------------------|
| <b>Description:</b>  | WM852 Viable Cells - WM852-01-0001 |
| <b>Item No.:</b>     | WM852-01-0001                      |
| <b>Size:</b>         | 1 million cells                    |
| <b>Applications:</b> | Cellular Assay, WB                 |
| <b>Origin:</b>       | Human                              |

**Product Details**

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Background:</b>        | WM852 is a metastatic melanoma cell line with epithelial morphology. This cell line was established from the metastatic site (abdomen) in a 63-year-old male. 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 deletion. This cell line expresses wild type BRAF, c-KIT and CDK4 genes. WM852 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, WB (Based on references) |
|--------------------------------|------------------------------------------|

|                          |                                                                                                                                                                                                                                                                           |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Application Note:</b> | 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. |
| <b>Assay Dilutions:</b>  | 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                                                                                                                                                  |
| <b>Cell Viability:</b> | Yes                                                                                                                                                         |
| <b>Stage:</b>          | Metastasis                                                                                                                                                  |
| <b>BRAF:</b>           | WT                                                                                                                                                          |
| <b>CDK4:</b>           | WT                                                                                                                                                          |
| <b>C-Kit:</b>          | WT                                                                                                                                                          |
| <b>N-RAS:</b>          | Q61R                                                                                                                                                        |
| <b>PTEN:</b>           | Hemizygous Deletion                                                                                                                                         |
| <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 1:5 every 5-6 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

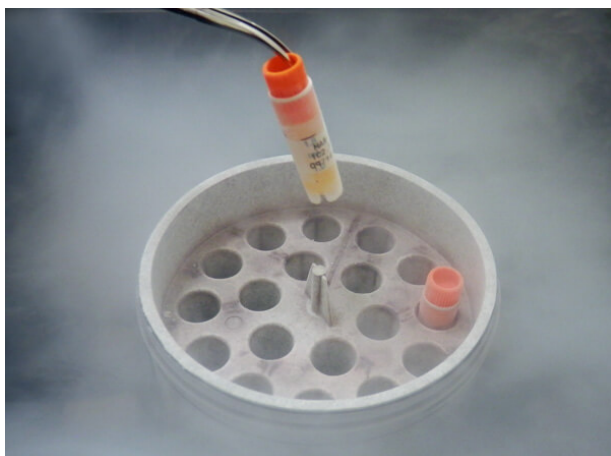
|                            |                                                                                                                                |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| <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



### Viable cell growth

Established WM852 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

- Oatman N et al. A Multimodal Drug-Diet-Immunotherapy Combination Restrains Melanoma Progression and Metastasis. *Cancer Res.* (2024)
- Oatman N et al. Mechanisms of stearyl CoA desaturase inhibitor sensitivity and acquired resistance in cancer. *Sci Adv.* (2021)
- Juraleviciute M et al. MX2 mediates establishment of interferon response profile, regulates XAF1, and can sensitize melanoma cells to targeted therapy. *Cancer Med.* (2021)
- Podder B et al. TAK1 suppresses RIPK1-dependent cell death and is associated with disease progression in melanoma. *Cell Death Differ.* (2019)
- Rozanc J et al. Phosphoprotein patterns predict trametinib responsiveness and optimal trametinib sensitisation strategies in melanoma. *Cell Death Differ.* (2019)

## 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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