## **Product Datasheet**

### MITF Antibody (C5/D5) [Janelia Fluor® 549] NBP3-11574JF549

Unit Size: 0.1 ml

Store at 4C in the dark.

www.novusbio.com

technical@novusbio.com

Protocols, Publications, Related Products, Reviews, Research Tools and Images at: www.novusbio.com/NBP3-11574JF549

Updated 10/26/2023 v.20.1

# Earn rewards for product reviews and publications.

Submit a publication at www.novusbio.com/publications Submit a review at www.novusbio.com/reviews/destination/NBP3-11574JF549



#### NBP3-11574JF549

MITF Antibody (C5/D5) [Janelia Fluor® 549]

Product Information	
Unit Size	0.1 ml
Concentration	Please see the vial label for concentration. If unlisted please contact technical services.
Storage	Store at 4C in the dark.
Clonality	Monoclonal
Clone	C5/D5
Preservative	0.05% Sodium Azide
Isotype	IgG1 Kappa
Conjugate	Janelia Fluor 549
Purity	Protein A or G purified
Buffer	50mM Sodium Borate
Product Description	
Host	Mouse
Gene ID	4286
Gene Symbol	MITF
Species	Human, Mouse (Negative), Rat (Negative)
Reactivity Notes	Does not react with Mouse and Rat.
Reactivity Notes Specificity/Sensitivity	Does not react with Mouse and Rat. MITF (microphthalmia transcription factor) is a basic helix-loop-helix-leucine- zipper (bHLH-Zip) transcription factor that regulates the development and survival of melanocytes and retinal pigment epithelium, and also is involved in transcription of pigmentation enzyme genes such as tyrosinase TRP1 and TRP2. MITF has been shown to be phosphorylated by MAP kinase in response to c-kit activation, resulting in upregulation of MITF transcriptional activity. Mutations of the MITF gene are associated with the autosomal dominant hereditary deafness and pigmentation condition, Waardenburg Syndrome type 2A. Multiple isoforms of MITF exist, including MITF-A, MITF-B, MITF-C, MITF-H, and MITF-M, which differ in the amino-terminal domain and in their expression patterns. The MITF-M isoform is restricted to the melanocyte cell lineage. Anti-MITF, D5, recognizes a nuclear protein, which is expressed in the majority of primary and metastatic epithelioid malignant melanomas as well as in normal melanocytes, benign nevi and dysplastic nevi.
•	MITF (microphthalmia transcription factor) is a basic helix-loop-helix-leucine- zipper (bHLH-Zip) transcription factor that regulates the development and survival of melanocytes and retinal pigment epithelium, and also is involved in transcription of pigmentation enzyme genes such as tyrosinase TRP1 and TRP2. MITF has been shown to be phosphorylated by MAP kinase in response to c-kit activation, resulting in upregulation of MITF transcriptional activity. Mutations of the MITF gene are associated with the autosomal dominant hereditary deafness and pigmentation condition, Waardenburg Syndrome type 2A. Multiple isoforms of MITF exist, including MITF-A, MITF-B, MITF-C, MITF-H, and MITF-M, which differ in the amino-terminal domain and in their expression patterns. The MITF-M isoform is restricted to the melanocyte cell lineage. Anti-MITF, D5, recognizes a nuclear protein, which is expressed in the majority of primary and metastatic epithelioid malignant melanomas as well as in normal melanocytes, benign nevi
Specificity/Sensitivity	MITF (microphthalmia transcription factor) is a basic helix-loop-helix-leucine- zipper (bHLH-Zip) transcription factor that regulates the development and survival of melanocytes and retinal pigment epithelium, and also is involved in transcription of pigmentation enzyme genes such as tyrosinase TRP1 and TRP2. MITF has been shown to be phosphorylated by MAP kinase in response to c-kit activation, resulting in upregulation of MITF transcriptional activity. Mutations of the MITF gene are associated with the autosomal dominant hereditary deafness and pigmentation condition, Waardenburg Syndrome type 2A. Multiple isoforms of MITF exist, including MITF-A, MITF-B, MITF-C, MITF-H, and MITF-M, which differ in the amino-terminal domain and in their expression patterns. The MITF-M isoform is restricted to the melanocyte cell lineage. Anti-MITF, D5, recognizes a nuclear protein, which is expressed in the majority of primary and metastatic epithelioid malignant melanomas as well as in normal melanocytes, benign nevi and dysplastic nevi.
Specificity/Sensitivity	<ul> <li>MITF (microphthalmia transcription factor) is a basic helix-loop-helix-leucine- zipper (bHLH-Zip) transcription factor that regulates the development and survival of melanocytes and retinal pigment epithelium, and also is involved in transcription of pigmentation enzyme genes such as tyrosinase TRP1 and TRP2.</li> <li>MITF has been shown to be phosphorylated by MAP kinase in response to c-kit activation, resulting in upregulation of MITF transcriptional activity. Mutations of the MITF gene are associated with the autosomal dominant hereditary deafness and pigmentation condition, Waardenburg Syndrome type 2A. Multiple isoforms of MITF exist, including MITF-A, MITF-B, MITF-C, MITF-H, and MITF-M, which differ in the amino-terminal domain and in their expression patterns. The MITF-M isoform is restricted to the melanocyte cell lineage. Anti-MITF, D5, recognizes a nuclear protein, which is expressed in the majority of primary and metastatic epithelioid malignant melanomas as well as in normal melanocytes, benign nevi and dysplastic nevi.</li> <li>NH2 terminus fragment of human MITF (Uniprot: O75030 )</li> <li>Sold under license from the Howard Hughes Medical Institute, Janelia Research</li> </ul>
Specificity/Sensitivity	<ul> <li>MITF (microphthalmia transcription factor) is a basic helix-loop-helix-leucine- zipper (bHLH-Zip) transcription factor that regulates the development and survival of melanocytes and retinal pigment epithelium, and also is involved in transcription of pigmentation enzyme genes such as tyrosinase TRP1 and TRP2.</li> <li>MITF has been shown to be phosphorylated by MAP kinase in response to c-kit activation, resulting in upregulation of MITF transcriptional activity. Mutations of the MITF gene are associated with the autosomal dominant hereditary deafness and pigmentation condition, Waardenburg Syndrome type 2A. Multiple isoforms of MITF exist, including MITF-A, MITF-B, MITF-C, MITF-H, and MITF-M, which differ in the amino-terminal domain and in their expression patterns. The MITF-M isoform is restricted to the melanocyte cell lineage. Anti-MITF, D5, recognizes a nuclear protein, which is expressed in the majority of primary and metastatic epithelioid malignant melanomas as well as in normal melanocytes, benign nevi and dysplastic nevi.</li> <li>NH2 terminus fragment of human MITF (Uniprot: O75030 )</li> <li>Sold under license from the Howard Hughes Medical Institute, Janelia Research</li> </ul>
Specificity/Sensitivity Immunogen Notes Product Application Details	<ul> <li>MITF (microphthalmia transcription factor) is a basic helix-loop-helix-leucine-zipper (bHLH-Zip) transcription factor that regulates the development and survival of melanocytes and retinal pigment epithelium, and also is involved in transcription of pigmentation enzyme genes such as tyrosinase TRP1 and TRP2.</li> <li>MITF has been shown to be phosphorylated by MAP kinase in response to c-kit activation, resulting in upregulation of MITF transcriptional activity. Mutations of the MITF gene are associated with the autosomal dominant hereditary deafness and pigmentation condition, Waardenburg Syndrome type 2A. Multiple isoforms of MITF exist, including MITF-A, MITF-B, MITF-C, MITF-H, and MITF-M, which differ in the amino-terminal domain and in their expression patterns. The MITF-M isoform is restricted to the melanocyte cell lineage. Anti-MITF, D5, recognizes a nuclear protein, which is expressed in the majority of primary and metastatic epithelioid malignant melanomas as well as in normal melanocytes, benign nevi and dysplastic nevi.</li> <li>NH2 terminus fragment of human MITF (Uniprot: O75030 )</li> <li>Sold under license from the Howard Hughes Medical Institute, Janelia Research Campus.</li> </ul>





#### Novus Biologicals USA

10730 E. Briarwood Avenue Centennial, CO 80112 USA Phone: 303.730.1950 Toll Free: 1.888.506.6887 Fax: 303.730.1966 nb-customerservice@bio-techne.com

#### **Bio-Techne Canada**

21 Canmotor Ave Toronto, ON M8Z 4E6 Canada Phone: 905.827.6400 Toll Free: 855.668.8722 Fax: 905.827.6402 canada.inquires@bio-techne.com

#### **Bio-Techne Ltd**

19 Barton Lane Abingdon Science Park Abingdon, OX14 3NB, United Kingdom Phone: (44) (0) 1235 529449 Free Phone: 0800 37 34 15 Fax: (44) (0) 1235 533420 info.EMEA@bio-techne.com

#### **General Contact Information**

www.novusbio.com Technical Support: nb-technical@biotechne.com Orders: nb-customerservice@bio-techne.com General: novus@novusbio.com

#### Products Related to NBP3-11574JF549

H00004286-P02-2ug	Recombinant Human MITF GST (N-Term) Protein
210-TA-005	TNF-alpha [Unconjugated]
NBP2-09070	MITF Overexpression Lysate
D6050	IL-6 [HRP]

#### Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

For more information on our 100% guarantee, please visit www.novusbio.com/guarantee

Earn gift cards/discounts by submitting a review: www.novusbio.com/reviews/submit/NBP3-11574JF549

Earn gift cards/discounts by submitting a publication using this product: www.novusbio.com/publications

www.novusbio.com

