

Microphthalmia Transcription Factor (MITF) Antibody

Mouse Monoclonal Antibody [Clone PCR-P-MITF-1D9]

Catalog No	Format	Size
4286-MSM7-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
4286-MSM7-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
4286-MSM7-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

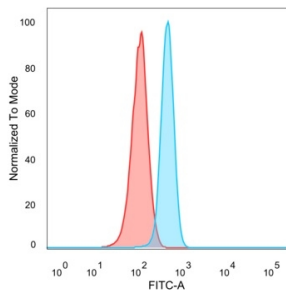
Applications	Tested Dilution	Note
Flow Cytometry (Flow)	1-2ug/million cells	
Immunofluorescence (IF)	1-3ug/ml	
Western Blot (WB)	2-4ug/ml	

Product Details

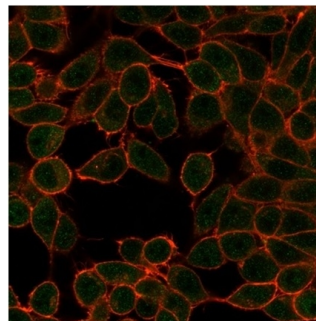
Clone	PCR-P-MITF-1D9
Gene Name	MITF
Immunogen	Recombinant full-length human MITF protein
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG2b
Mol. Weight of Antigen	52-56kDa (doublet)
Cellular Localization	Cytoplasm, Nucleus
Species Reactivity	Human
Positive Control	A-431, HeLa or 501 Mel human melanoma cells. Human melanoma., Jurkat

*Optimal dilution for a specific application should be determined.

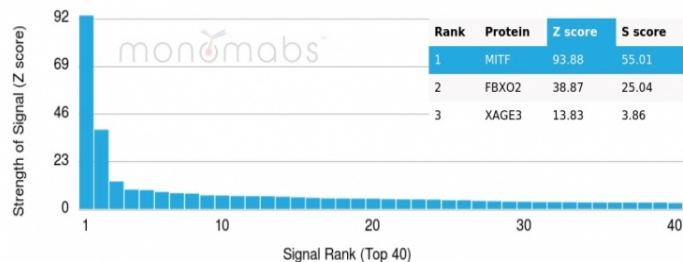
Product Images for Microphthalmia Transcription Factor (MITF) Antibody



Flow cytometric analysis of PFA-fixed HeLa cells. MITF Mouse Monoclonal Antibody (PCR-P-MITF-1D9) followed by goat anti-mouse IgG-CF488 (blue); isotype control (red).



Flow cytometric analysis of PFA-fixed HeLa cells. MITF Mouse Monoclonal Antibody (PCR-P-MITF-1D9) followed by goat anti-mouse IgG-CF488 (blue); isotype control (red).



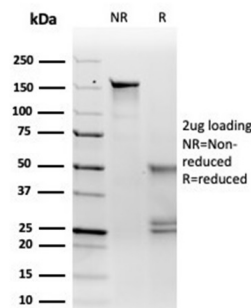
Analysis of Protein Array containing more than 19,000 full-length human proteins using MITF-Monospecific Mouse Monoclonal Antibody (PCR-MITF-1D9). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to be specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.

Specificity & Comments

MITF (microphthalmia-associated transcription factor) is a melanocytic nuclear protein that contains basic helix-loop-helix (HLH) and leucine zipper (LZ) domains. These protein motifs are frequently observed in other transcription factors and are particularly common to members of the Myc family. MITF can directly associate with DNA as a homodimer and is required for the development and differentiation of melanocytes. Its expression is upregulated by cAMP and cAMP-dependent pathways. MITF activates several different gene promoters by binding to their E-boxes. Tyrosinase, TRP1 and TRP2 are pigment synthesis genes activated by MITF. When MITF is phosphorylated on Ser73 (via the MAPK pathway), it associates with co-activators of the p300/CBP family and enhances transcription. MITF has several isoforms including MITF-M which is specifically expressed in melanocytes. In MITF-deficient mice there is a complete absence of melanocytes.

Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.



SDS-PAGE Analysis of Purified MITF Mouse Monoclonal Antibody (PCR-MITF-1D9). Confirmation of Integrity and Purity of Antibody.

Supplied As

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage and Stability

Antibody with azide - store at 2 to 8 °C. Antibody without azide - store at -20 to -80 °C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

Research Areas

B Cell Markers, Cardiovascular, Mast Cell Marker, Stem Cell Differentiation