

GATA4 Antibody

Mouse Monoclonal Antibody [Clone PCRP-GATA4-1A7]

Catalog No	Format	Size
2626-MSM1-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
2626-MSM1-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
2626-MSM1-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

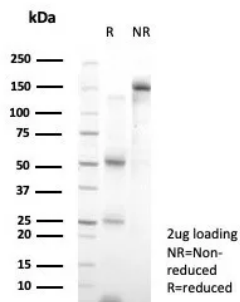
Applications	Tested Dillution	Note
Flow Cytometry (Flow)	1-2ug/million cells	

Product Details

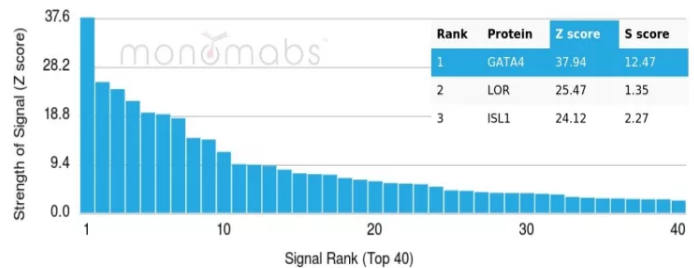
Clone	PCRP-GATA4-1A7
Gene Name	GATA4
Immunogen	Recombinant fragment (around aa262-321) of human GATA4 protein
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG2b
Mol. Weight of Antigen	44.57kDa
Cellular Localization	Nucleus.
Species Reactivity	Human
Positive Control	HeLa or MCF-7 cells.

*Optimal dilution for a specific application should be determined.

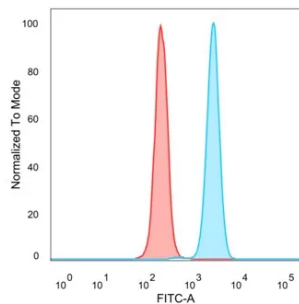
Product Images for GATA4 Antibody



SDS-PAGE Analysis of Purified GATA4 Mouse Monoclonal Antibody (PCRP-GATA4-1A7) Confirmation of Purity and Integrity of Antibody.



Analysis of Protein Array containing more than 19,000 full-length human proteins using GATA4 Mouse Monoclonal Antibody (PCRP-GATA4-1A7). 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.



Flow Cytometric Analysis of PFA-fixed HeLa cells. GATA4 Mouse Monoclonal Antibody (PCRP-GATA4-1A7) followed by goat anti-mouse IgG-CF488 (blue); unstained cells (red).

Specificity & Comments

Members of the GATA family share a conserved zinc finger DNA-binding domain and are capable of binding the WGATAR consensus sequence. GATA-1 is erythroid-specific and is responsible for the regulated transcription of erythroid genes. It is an essential component in the generation of the erythroid lineage. GATA-2 is expressed in embryonic brain and liver, HeLa and endothelial cells, as well as erythroid cells. Studies with a modified GATA consensus sequence, AGATCTTA, have shown that GATA-2 and GATA-3 recognize this mutated consensus while GATA-1 has poor recognition of this sequence. This indicates broader regulatory capabilities of GATA-2 and GATA-3 than GATA-1. GATA-3 is highly expressed in T lymphocytes. GATA-4, GATA-5 and GATA-6 comprise a subfamily of transcription factors. GATA-4 and GATA-6 are found in heart, pancreas and ovary; lung and liver tissues exhibit GATA-6, but not GATA-4, expression. GATA-5 expression has been observed in differentiated heart and gut tissues and is present throughout the course of development in the heart. Although expression patterns of the various GATA transcription factors may overlap, it is not yet apparent how the GATA factors are able to discriminate in binding their appropriate target sites.

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.

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

Cardiac Stem Cells, Cardiovascular, Developmental Biology, Mesenchymal Stem Cell Differentiation, Nuclear Marker, Stem Cell Differentiation, Transcription Factors