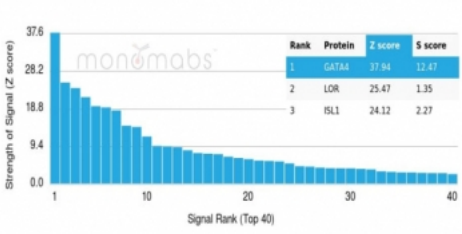
GATA4 Antibody / GATA-binding factor 4 [clone PCRP-GATA4-1A7] (V5243)

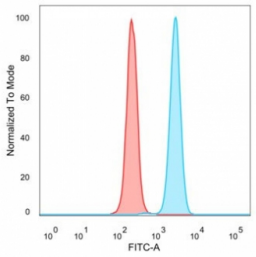
Catalog No.	Formulation	Size
V5243-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5243-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5243SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

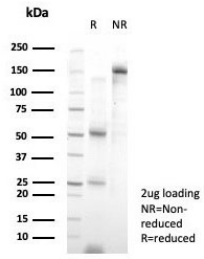
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b
Clone Name	PCRP-GATA4-1A7
Purity	Protein A/G affinity
UniProt	P43694
Localization	Nucleus
Applications	Flow Cytometry : 1-2ug/million cells
Limitations	This GATA4 antibody is available for research use only.



Analysis of a HuProt(TM) microarray containing more than 19,000 full-length human proteins using GATA4 antibody (clone PCRP-GATA4-1A7). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt(TM) 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(TM) 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 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 cytometry testing of PFA-fixed human HeLa cells with GATA4 antibody (clone PCRP-GATA4-1A7) followed by goat anti-mouse IgG-CF488 (blue); Red = unstained cells.



SDS-PAGE analysis of purified, BSA-free GATA4 antibody (clone PCRP-GATA4-1A7) as confirmation of integrity and purity.

Description

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.

Application Notes

Optimal dilution of the GATA4 antibody should be determined by the researcher.

Immunogen

A recombinant partial protein sequence (within amino acids 262-321) from the human protein was used as the immunogen for the GATA4 antibody.

Storage

Aliquot the GATA4 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.