Human GATA-3
Alexa Fluor® 594-conjugated Antibody

Monoclonal Mouse IgG_{2B} Clone # 634919

Catalog Number: IC63301T

25 Tests

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human GATA-3 in flow cytometry.
Source	Monoclonal Mouse IgG_{2B} Clone # 634919
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	*E. coli*-derived recombinant human GATA-3 Pro135-Ser258 Accession # P23771
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm
Formulation	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

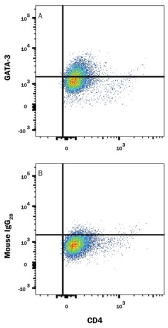
APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Intracellular Staining by Flow Cytometry	5 µL/10^6 cells	See Below

DATA

Intracellular Staining by Flow Cytometry



Detection of GATA-3 in Human PBMCs by Flow Cytometry. Th2-stimulated human peripheral blood mononuclear cells (PBMCs) were stained with Mouse Anti-Human CD4 Alexa Fluor® 700-conjugated Monoclonal Antibody (Catalog # FAB3791N) and either (A) Mouse Anti-Human GATA-3 Alexa Fluor® 594-conjugated Monoclonal Antibody (Catalog # IC63301T) or (B) Mouse IgG_{2B} Alexa Fluor 594 Isotype Control (Catalog # IC0041T). To facilitate intracellular staining, cells were fixed and permeabilized with FlowX FoxP3 Fixation & Permeabilization Buffer Kit (Catalog # FC012). View our protocol for Staining Intracellular Molecules.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	**Protect from light. Do not freeze.** ● 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

GATA-3 is a 54-60 kDa member of the GATA family of transcription regulating factors. There are currently six mammalian members, each of which binds to a G-A-T-A motif found in gene promoters. Although GATA-3 is traditionally described as being a hematopoietic transcriptional regulator, it has been found in multiple cell types, both embryonic and adult. Postnatal cells reported to express GATA-3 include NK cells, ILCs, NKT cells, B cells, thymocytes (DN, CD4 SP, and CD8 SP) and T cells, plus keratinocytes, sympathetic neurons, renal distal convoluted tubule and mammary duct epithelium. Human GATA-3 is 443 amino acids (aa) in length. It contains two GAGA-type Zn finger domains (aa 263-287 and 317-341) and multiple phosphorylation sites. GATAs as a group are known to either activate, or repress, gene expression, maintain transcriptional activity, and regulate gene expression levels. Within this framework, GATA-3 is best known to drive naïve CD4+ T cells into a Th2 phenotype, induce Th2 proliferation, and inhibit Th1 cell development via T-bet repression. Other effects attributed to GATA-33 include the promotion of Th9 and Treg formation, and the inhibition of Th1, TH17 and B cell development. Over aa 135-258, human and mouse GATA-3 share 94% aa sequence identity.

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