

GATA3 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1156a**Specification**

GATA3 Antibody - Product Information

Application	WB, E
Primary Accession	P23771
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1

Description

GATA3: GATA binding protein 3. The genes for all 4 subunits of the T-cell antigen receptor (alpha, beta, gamma and delta) are controlled by distinct enhancers and their enhancer-binding proteins. Marine and Winoto (1991) identified a common TCR regulatory element by demonstrating binding of the enhancer-binding protein GATA3 to the enhancer elements of all 4 TCR genes. GATA3 had been shown in the chicken to be an enhancer-binding protein containing a zinc finger domain. GATA3 mRNA was demonstrated by Northern blot analysis in T cells but not in B cells, macrophages, or HeLa cell lines. GATA3 is abundantly expressed in the T-lymphocyte lineage and is thought to participate in T-cell receptor gene activation through binding to enhancers. Labastie et al. (1994) cloned the human gene and the 5-prime end of the mouse gene. The human gene comprises 6 exons distributed over 17 kb of DNA. Its 2 zinc fingers are encoded by 2 separate exons highly conserved with those of GATA1, but no other structural homologies between the 2 genes could be found.

Immunogen

Purified recombinant fragment of GATA3 (aa175-388) expressed in E. Coli.

Formulation

Ascitic fluid containing 0.03% sodium azide.

GATA3 Antibody - Additional Information

Gene ID 2625

Other Names

Trans-acting T-cell-specific transcription factor GATA-3, GATA-binding factor 3, GATA3

Dilution

WB~~1/500 - 1/2000

E~~N/A

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

GATA3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

GATA3 Antibody - Protein Information

Name GATA3

Function

Transcriptional activator which binds to the enhancer of the T-cell receptor alpha and delta genes. Binds to the consensus sequence 5'-AGATAG-3'. Required for the T-helper 2 (Th2) differentiation process following immune and inflammatory responses. Positively regulates ASB2 expression (By similarity). Coordinates macrophage transcriptional activation and UCP2-dependent metabolic reprogramming in response to IL33. Upon tissue injury, acts downstream of IL33 signaling to drive differentiation of inflammation-resolving alternatively activated macrophages.

Cellular Location

Nucleus.

Tissue Location

T-cells and endothelial cells.

GATA3 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

GATA3 Antibody - Images

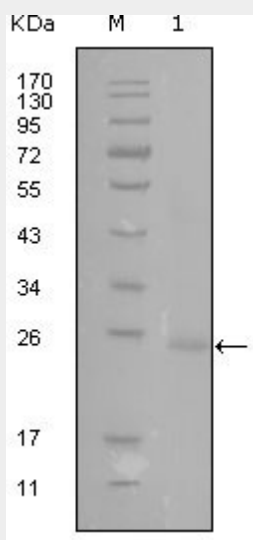


Figure 1: Western blot analysis using GATA3 mouse mAb against truncated GATA3-His recombinant protein (1).

GATA3 Antibody - References

1. Cancer Res. 2005 Dec 15;65(24):11259-64. 2. J Histochem Cytochem. 2006 Feb;54(2):161-9. 3. Int Arch Allergy Immunol. 2006;139(4):306-16.