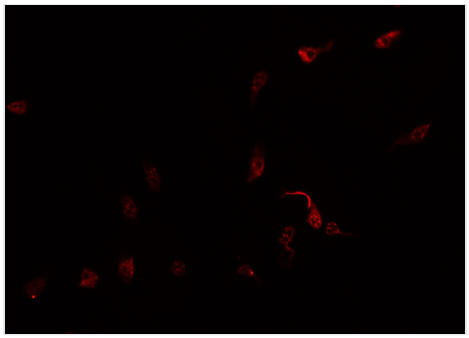
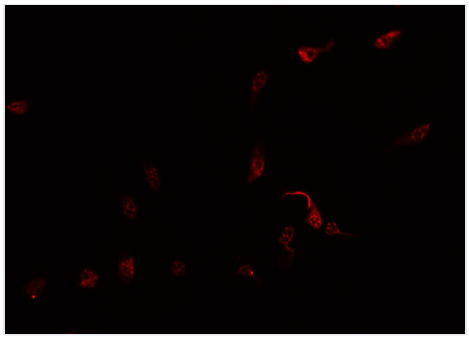
GATA4 Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

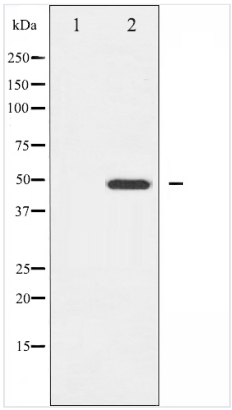
Product Name	GATA4, Polyclonal Antibody
Full Product Name	GATA4 Antibody
Product Gene Name	anti-GATA4 antibody
Product Synonym Names	ASD2; GATA 4; GATA binding protein 4; GATA-binding factor 4; gata4; GATA4_HUMAN; MGC126629; Transcription factor GATA 4; Transcription factor GATA-4; Transcription factor GATA4; VSD1
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human, Mouse, Rat
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purity/Purification	Peptide affinity purification
Concentration	~1mg/ml (lot specific)
Specificity	GATA4 antibody detects endogenous levels of total GATA4
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.
Antibody/Peptide Pairs	GATA4 peptide (MBS9617442) is used for blocking the activity of GATA4 antibody (MBS9601889)
Molecular Weight	48 kDa
3D Structure	ModBase 3D Structure for P43694
Supply Chain Verification	Manufactured in a lab with traceable raw materials manufactured on site. Coordinated product portfolio of antibodies, pairs, conjugates, recombinant proteins, and immunoassay materials available, please inquire.
Immunogen	A synthesized peptide derived from human GATA4, corresponding to a region within the internal amino acids.
Conjugation	Unconjugated
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for anti-GATA4 antibody	Western Blot (WB), Immunofluorescence (IF), Immunocytochemistry (ICC), ELISA (EIA)
Application Notes for anti-GATA4 antibody	WB: 1:500-1:2000 IF/ICC: 1:100-1:500 ELISA (peptide): 1:20000-1:40000 The optimal dilution should be determined by the end user. IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v milk , 1X TBS, 0.1% Tween®20 at 4°C with gentle shaking, overnight.
Related Product Information for anti-GATA4 antibody	MBS9601889 is an antibody targeting GATA4. Also known as GATA4 Antibody. Reactive in Human, Mouse, Rat. Host: Rabbit.
Other Notes	Small volumes of anti-GATA4 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.



Immunofluorescence (IF) of anti-GATA4 antibody
MBS9601889 staining 293 by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.



Immunofluorescene (IF) of anti-GATA4 antibody
MBS9601889 staining Hep G2 cells by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) antibody, diluted at 1/600, was used as secondary antibody.



Western Blot (WB) of anti-GATA4 antibody
Western blot analysis of GATA4 expression in HeLa whole cell lysates, The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for GATA4. It may not necessarily be applicable to this product.

NCBI GI #	815890849
NCBI GeneID	2626
NCBI Accession #	NP_001295022.1
UniProt Primary Accession #	P43694
UniProt Secondary Accession #	Q3MJ45; Q5IFM8; B7ZKX0; B7ZKZ4
UniProt Related Accession #	P43694
GenBank Nucleotide #	NM_001308093.1
NCBI Official Full Name	transcription factor GATA-4 isoform 1
NCBI Official Synonym Full Names	GATA binding protein 4
NCBI Official Symbol	GATA4
NCBI Official Synonym Symbols	TOF; ASD2; VSD1; TACHD
UniProt Protein Name	Transcription factor GATA-4
UniProt Synonym Protein Names	GATA-binding factor 4
Protein Family	GATA transcription factor

UniProt Gene Name	GATA4
NCBI Protein Information	transcription factor GATA-4
NCBI Summary for GATA4	This gene encodes a member of the GATA family of zinc-finger transcription factors. Members of this family recognize the GATA motif which is present in the promoters of many genes. This protein is thought to regulate genes involved in embryogenesis and in myocardial differentiation and function, and is necessary for normal testicular development. Mutations in this gene have been associated with cardiac septal defects. Additionally, alterations in gene expression have been associated with several cancer types. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Apr 2015]
UniProt Comments for GATA4	Transcriptional activator that binds to the consensus sequence 5'-AGATAG-3' and plays a key role in cardiac development and function (PubMed:24000169, PubMed:27984724). In cooperation with TBX5, it binds to cardiac super-enhancers and promotes cardiomyocyte gene expression, while it downregulates endocardial and endothelial gene expression (PubMed:27984724). Involved in bone morphogenetic protein (BMP)-mediated induction of cardiac-specific gene expression. Binds to BMP response element (BMPRE) DNA sequences within cardiac activating regions (). Acts as a transcriptional activator of ANF in cooperation with NKX2-5 (). Promotes cardiac myocyte enlargement (PubMed:20081228). Required during testicular development (PubMed:21220346). May play a role in sphingolipid signaling by regulating the expression of sphingosine-1-phosphate degrading enzyme, spingosine-1-phosphate lyase (PubMed:15734735).
Research Articles on GATA4	**1.** GATA4 variants were not associated with Alcohol Use Disorder (AUD) in either the European ancestry or African ancestry groups after correcting for multiple comparisons. Rs10112596 demonstrated a significant relationship with an anxiety measure among the African ancestry group with AUD.
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