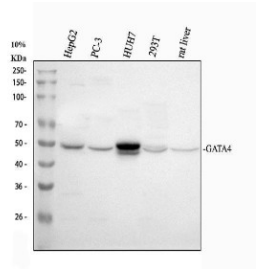
GATA4 Antibody / Cardiac Transcription Factor Antibody (R32844)

Catalog No.	Formulation	Size
R32844	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Species Reactivity	Human, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P43694
Applications	Western Blot: 0.5-1ug/ml
Limitations	This GATA4 Antibody / Cardiac Transcription Factor Antibody is available for research use only.



GATA4 Antibody Human and Rat WB. Western blot analysis of GATA4 Antibody using lysates from lane 1: human HepG2 cells, lane 2: human PC-3 cells, lane 3: human HUH7 cells, lane 4: human 293T cells and lane 5: rat liver tissue. A prominent band is detected at approximately 54 kDa in all samples, which is commonly observed for GATA4 despite a predicted molecular weight of approximately 45 kDa, likely reflecting post-translational modification. These results demonstrate cross-species detection of endogenous GATA4 and support the use of GATA4 Antibody, a Cardiac Transcription Factor Antibody, for studies of transcriptional regulation, organ development and cardiovascular biology.

Description

GATA4 Antibody / Cardiac Transcription Factor Antibody recognizes GATA binding protein 4 (GATA4), a zinc finger transcription factor that plays a central role in embryonic development and tissue-specific gene regulation. GATA4 is best known as a master regulator of cardiac development, where it controls the expression of genes required for cardiomyocyte differentiation, cardiac morphogenesis and normal heart function. Through interactions with other cardiac transcription factors, GATA4 coordinates developmental programs essential for cardiovascular formation and adaptation. NSJ Bioreagents offers high-quality GATA4 Antibody reagents for investigating cardiac biology and transcriptional regulation.

GATA4 regulates numerous genes involved in myocardial growth, cell survival and cardiac remodeling throughout development and adulthood. It cooperates with transcription factors including NKX2-5, TBX5 and MEF2 family members to activate cardiac-specific gene expression and promote differentiation of cardiac progenitor cells. In addition to its developmental functions, GATA4 participates in the molecular response to cardiac stress, contributing to adaptive hypertrophy, myocardial repair and protection against apoptosis. As a result, GATA4 Antibody is widely used to investigate transcriptional networks controlling heart development and cardiovascular disease.

Beyond the cardiovascular system, GATA4 contributes to the development and function of several endoderm-derived organs, including the liver, pancreas, stomach and intestine, while also playing important roles in gonadal development and reproductive biology. Altered GATA4 expression has been associated with congenital heart defects, cancer progression and developmental disorders, making it an important target in both basic and translational research. Continued investigation of GATA4 has expanded understanding of how lineage-specific transcription factors regulate organogenesis, cellular differentiation and tissue homeostasis across multiple biological systems.

An GATA4 Antibody is a valuable reagent for investigating cardiac development, transcriptional regulation and organogenesis. A Cardiac Transcription Factor Antibody supports research involving heart development, congenital cardiovascular disorders, stem cell differentiation and developmental gene regulatory networks.

Researchers studying heart development, embryogenesis and lineage-specific gene regulation may also be interested in our Transcription Factor Antibodies page, featuring antibodies against key regulators of cellular differentiation and organ development.

Application Notes

Optimal dilution of the GATA4 Antibody / Cardiac Transcription Factor Antibody should be determined by the researcher.

Immunogen

Amino acids 419-442 (QTSSKQDSWNSLVLADSHGDIITA) were used as the immunogen for the GATA4 antibody.

Storage

After reconstitution, the GATA4 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

GATA4 antibody, Cardiac Transcription Factor antibody, GATA Binding Protein 4 antibody, Transcription Factor GATA-4 antibody

Copyright © NSJ Bioreagents. All rights reserved.