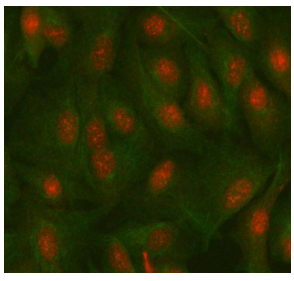
MAZ Antibody / Myc associated zinc finger protein (FY12067)

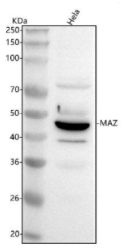
Catalog No.	Formulation	Size
FY12067	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

Bulk quote request

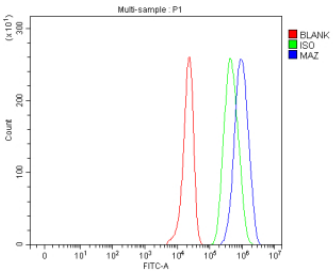
Availability	1-2 days
Species Reactivity	Human
Format	Lyophilized
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Immunogen affinity purified
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	P56270
Applications	Western Blot : 0.25-0.5ug/ml Immunocytochemistry : 5ug/ml Immunofluorescence : 5ug/ml Flow Cytometry : 1-3ug/million cells ELISA : 0.1-0.5ug/ml
Limitations	This MAZ antibody is available for research use only.



Immunofluorescent staining of MAZ using anti-MAZ antibody (red) and anti-Beta Tubulin antibody (green). MAZ was detected in immunocytochemical section of cell. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 ug/ml rabbit anti-MAZ antibody and mouse anti-Beta Tubulin antibody overnight at 4oC. Cy3 Conjugated Goat Anti-Rabbit IgG and DyLight 488 Conjugated Goat Anti-Mouse IgG were used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37oC. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



Western blot analysis of MAZ using anti-MAZ antibody. Lane 1: human Hela whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-MAZ antibody at 0.5 ug/ml overnight at 4oC, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal was developed using enhanced chemiluminescent. The expected band size for MAZ is 46-51 kDa (three isoforms).



Flow Cytometry analysis of HepG2 cells using anti-MAZ antibody. Overlay histogram showing HepG2 cells stained with (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-MAZ antibody (1 ug/million cells) for 30 min at 20oC. DyLight 488 conjugated goat anti-rabbit IgG (5-10 ug/million cells) was used as secondary antibody for 30 minutes at 20oC. Isotype control antibody (Green line) was rabbit IgG (1 ug/million cells) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

Description

MAZ antibody detects Myc associated zinc finger protein, encoded by the MAZ gene. Myc associated zinc finger protein is a transcription factor that regulates gene expression through GC-rich DNA elements and is involved in cell growth, apoptosis, and oncogenesis. MAZ antibody provides researchers with a critical reagent for studying transcriptional regulation and cancer biology.

Myc associated zinc finger protein belongs to the Kruppel family of zinc finger proteins and contains six C2H2-type zinc fingers. Research using MAZ antibody has shown that it binds to GC-rich promoter elements and initiator regions, where it regulates transcription of a wide range of genes. These include c-Myc, VEGF, and insulin receptor genes, linking MAZ to proliferation, angiogenesis, and metabolism.

Studies with MAZ antibody have revealed that the protein has dual transcriptional roles, functioning as both an activator and repressor depending on context. It recruits transcriptional co-regulators and chromatin remodelers, fine-tuning expression of growth-related genes. This versatility makes MAZ a central node in transcriptional networks controlling development and disease.

Dysregulation of Myc associated zinc finger protein has been associated with cancer, cardiovascular disease, and neurodegeneration. Research using MAZ antibody has shown that overexpression promotes tumor growth and angiogenesis by upregulating VEGF and c-Myc. It has also been implicated in atherosclerosis, where it regulates vascular smooth muscle proliferation, and in neurodegenerative disorders, where altered transcription contributes to pathology.

MAZ antibody is commonly used in chromatin immunoprecipitation, western blotting, and immunohistochemistry. Chromatin immunoprecipitation identifies promoter binding sites, western blotting quantifies expression in normal and cancer tissues, and immunohistochemistry demonstrates nuclear localization in proliferating cells. These applications make MAZ antibody valuable for transcriptional and oncogenesis research.

By supplying validated MAZ antibody reagents, NSJ Bioreagents supports studies into transcriptional control, oncogenesis, and vascular biology. Detection of Myc associated zinc finger protein provides researchers with insight into how zinc finger proteins regulate gene expression and disease.

Application Notes

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

Immunogen

E.coli-derived human MAZ recombinant protein (Position: M1-E430) was used as the immunogen for the MAZ antibody.

Storage

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