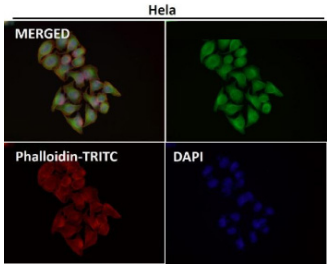
HOXC6 Antibody / Homeobox C6 [clone 31H41] (FY12295)

Catalog No.	Formulation	Size
FY12295	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA	100 ul

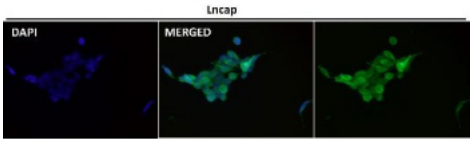
Recombinant RABBIT MONOCLONAL

Bulk quote request

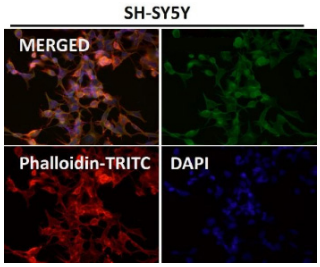
Availability	2-3 weeks
Species Reactivity	Human, Mouse, Rat
Format	Liquid
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	31H41
Purity	Affinity-chromatography
Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
UniProt	P09630
Applications	Immunofluorescence: 1:50-1:200 Immunocytochemistry/Western blot: 1:500-1:2000
Limitations	This HOXC6 antibody is available for research use only.



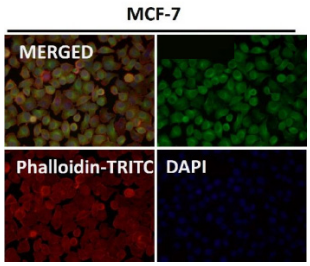
Immunofluorescent analysis using the HOXC6 antibody (green) at 1:50 dilution.



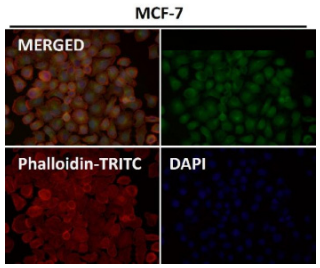
Immunofluorescent analysis using the HOXC6 antibody (green) at 1:50 dilution.



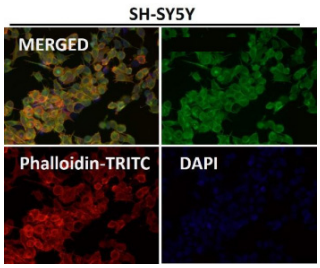
Immunofluorescent analysis using the HOXC6 antibody (green) at 1:150 dilution.



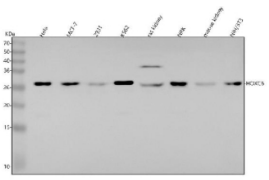
Immunofluorescent analysis using the HOXC6 antibody (green) at 1:50 dilution.



Immunofluorescent analysis using the HOXC6 antibody (green) at 1:150 dilution.



Immunofluorescent analysis using the HOXC6 antibody (green) at 1:50 dilution.



Western blot analysis of HoxC6 using anti-HoxC6 antibody. Lane 1: human Hela whole cell lysates, Lane 2: human MCF-7 whole cell lysates, Lane 3: human 293T whole cell lysates, Lane 4: human K562 whole cell lysates, Lane 5: rat kidney tissue lysates, Lane 6: rat NRK whole cell lysates, Lane 7: mouse kidney tissue lysates, Lane 8: mouse NIH/3T3 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-HoxC6 antibody at 1:500 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 1:500 for 1.5 hour at RT. The signal was developed using enhanced chemiluminescent. A specific band was detected for HoxC6 at approximately 26,27 kDa. The expected molecular weight of HoxC6 is ~27 kDa.

Description

HOXC6 antibody is designed to detect homeobox C6, a transcription factor belonging to the highly conserved homeobox (HOX) gene family. HOX proteins play a critical role in embryonic development, body patterning, and organogenesis by regulating gene expression programs that control cell fate and differentiation. HOXC6 in particular is expressed in multiple tissues and has been associated with developmental pathways of the nervous system, skeletal formation, and epithelial differentiation. Like other HOX proteins, it functions as a DNA-binding transcription factor that regulates the transcription of downstream target genes.

HOXC6 antibody is widely used in developmental biology and cancer research. Aberrant expression of HOXC6 has been documented in several malignancies, including prostate, breast, and colorectal cancers. Its altered activity contributes to tumor cell proliferation, invasion, and metastasis by regulating epithelial-mesenchymal transition and transcriptional programs that promote oncogenesis. Reliable detection of HOXC6 protein levels with HOXC6 antibody allows researchers to investigate how this transcription factor supports tumor progression and whether it can serve as a biomarker for aggressive disease.

HOXC6 antibody is suitable for applications such as western blotting, immunohistochemistry, immunofluorescence, and flow cytometry. In western blot assays, the antibody specifically recognizes HOXC6 protein bands, enabling comparisons of expression across experimental conditions. In immunohistochemistry, HOXC6 antibody localizes nuclear staining patterns within tissue sections, confirming its role as a transcription factor. Immunofluorescence provides additional resolution, allowing visualization of nuclear expression alongside markers of proliferation and differentiation. These applications make the antibody versatile for both basic research and translational studies.

In cancer biology, HOXC6 antibody provides an important tool to investigate how transcriptional networks are rewired to promote malignant behavior. Studies have shown that HOXC6 can regulate genes involved in cell cycle progression, angiogenesis, and drug resistance. Elevated expression correlates with poor prognosis in several cancer types, making HOXC6 an attractive candidate for therapeutic targeting. Detecting HOXC6 with specific antibodies is therefore critical for both mechanistic research and biomarker development.

Beyond oncology, HOXC6 antibody is useful for developmental studies. During embryogenesis, HOXC6 plays a role in specifying anterior-posterior patterning, ensuring correct structural formation. Its expression in neural and epithelial tissues highlights its importance in differentiation pathways that extend beyond cancer. By detecting HOXC6 during development, researchers can better understand how transcription factors coordinate cell fate decisions and how dysregulation contributes to congenital disorders.

HOXC6 antibody provided by NSJ Bioreagents offers researchers a reliable reagent for dissecting transcriptional regulation in both health and disease. Its specificity ensures accurate recognition across multiple assay formats, enabling detailed investigations into the role of HOXC6 in development and oncogenesis.

Application Notes

Optimal dilution of the HOXC6 antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human HoxC6 was used as the immunogen for the HOXC6 antibody.

Storage

Store the HOXC6 antibody at -20oC.

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