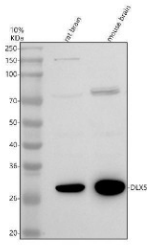
Distal-Less Homeobox 5 Antibody / DLX-5 Antibody (FY13481)

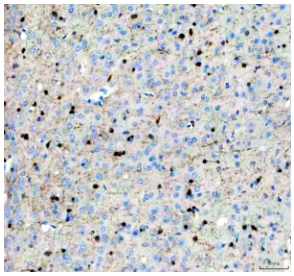
Catalog No.	Formulation	Size
FY13481	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Species Reactivity	Mouse, Rat
Format	Lyophilized
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P68104
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 2-5ug/ml
Limitations	This Distal-Less Homeobox 5 Antibody / DLX-5 Antibody is available for research use only.



Distal-Less Homeobox 5 Antibody Rat and Mouse Brain WB. Western blot analysis of Distal-Less Homeobox 5 Antibody using lysates from 1) rat brain and 2) mouse brain. Samples (30 ug/lane) were separated on a 10% SDS-PAGE gel under reducing conditions, transferred to a nitrocellulose membrane, and probed with Distal-Less Homeobox 5 Antibody (0.5 ug/mL), followed by an HRP-conjugated secondary antibody and ECL detection. A specific band is detected at approximately 33 kDa in both rat and mouse brain lysates, consistent with the predicted molecular weight of DLX5 (approximately 32 kDa). These results demonstrate that Distal-Less Homeobox 5 Antibody, a DLX-5 Antibody, specifically detects endogenous DLX5 across rodent brain tissues.



Distal-Less Homeobox 5 Antibody IHC Staining of Mouse Brain Tissue. Immunohistochemical analysis of FFPE mouse brain tissue using DLX-5 Antibody at 2 ug/ml. Brown DAB immunoreactivity is observed in scattered nuclei throughout the tissue section, with variable staining intensity and comparatively limited cytoplasmic staining. Heat-induced epitope retrieval was performed using EDTA buffer, pH 8.0. The predominantly nuclear staining pattern is consistent with the transcription factor function of DLX5.



Distal-Less Homeobox 5 Antibody IHC Staining of Rat Brain Tissue. Immunohistochemical analysis of FFPE rat brain tissue using DLX-5 Antibody at 2 ug/ml. Brown DAB immunoreactivity is observed in numerous scattered nuclei, with heterogeneous staining intensity against a background of predominantly blue hematoxylin-counterstained cells. Heat-induced epitope retrieval was performed using EDTA buffer, pH 8.0. The nuclear staining pattern is consistent with the established role of DLX5 in transcriptional regulation.

Description

Distal-Less Homeobox 5 Antibody recognizes DLX5, a homeobox-containing transcription factor that directs gene expression during embryonic development and tissue differentiation. As a member of the distal-less family of developmental regulators, DLX5 controls transcriptional programs required for craniofacial patterning, skeletal formation, limb development, and the maturation of multiple epithelial and mesenchymal tissues. By binding specific DNA regulatory elements, DLX5 coordinates lineage commitment and cellular differentiation throughout development. Consequently, Distal-Less Homeobox 5 Antibody is widely used to investigate developmental gene regulation and tissue-specific differentiation pathways.

DLX5 is best known for its critical role in osteoblast differentiation and bone formation. It functions upstream of key osteogenic regulators, including RUNX2, and promotes the expression of genes required for extracellular matrix production and mineralization. DLX5 also contributes to tooth development, neural crest differentiation, inner ear morphogenesis, and bone morphogenetic protein signaling. Because of these diverse biological functions, Distal-Less Homeobox 5 Antibody is valuable for studies of skeletal biology, regenerative medicine, stem cell differentiation, and developmental signaling. Researchers also employ DLX-5 Antibody to investigate mechanisms governing lineage specification and tissue regeneration.

Altered DLX5 expression has been reported in several human malignancies, including breast, ovarian, lung, prostate, and endometrial cancers, where abnormal transcriptional regulation may contribute to tumor progression, proliferation, migration, and epithelial-to-mesenchymal transition. In addition, mutations or dysregulated expression of DLX5 have been associated with developmental abnormalities affecting craniofacial structures, hearing, and skeletal formation. These findings have expanded the use of Distal-Less Homeobox 5 Antibody in cancer biology, developmental genetics, and translational research aimed at understanding tissue-specific transcriptional control.

NSJ Bioreagents offers Distal-Less Homeobox 5 Antibody products validated for research applications to support reliable detection of DLX5 across multiple experimental platforms. Whether performing Western blotting, immunohistochemistry, immunofluorescence, immunoprecipitation, or flow cytometry, a well-validated DLX-5 Antibody enables accurate analysis of DLX5 expression and localization.

For additional antibodies targeting the DLX5, visit our DLX5 Antibody / Homeobox Transcription Factor Antibody page to explore complementary products, validation data, and application results.

Application Notes

Optimal dilution of the Distal-Less Homeobox 5 Antibody / DLX-5 Antibody should be determined by the researcher.

Immunogen

E. coli-derived recombinant human DLX-5 protein (amino acids M1-G228) was used as the immunogen for the Distal-Less Homeobox 5 Antibody.

Storage

After reconstitution, the Distal-Less Homeobox 5 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

Distal-Less Homeobox 5 antibody, DLX-5 antibody, DLX5 antibody, Homeobox Protein DLX5 antibody, Distal-Less Related Homeobox 5 antibody, Homeobox Transcription Factor antibody

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