

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human DLX5 in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant human DLX4 is observed.
Source	Monoclonal Mouse IgG _{2A} Clone # 712216
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human DLX5 Asn216-Tyr289 Accession # P56178
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

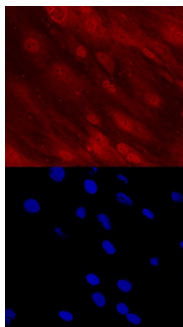
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Immunocytochemistry	8-25 µg/mL	See Below

DATA

Immunocytochemistry



DLX5 in Human Mesenchymal Stem Cells. DLX5 was detected in immersion fixed human mesenchymal stem cells differentiated into osteocytes using Mouse Anti-Human DLX5 Monoclonal Antibody (Catalog # MAB6710) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red, upper panel; Catalog # NL007) and counterstained with DAPI (blue, lower panel). Specific staining was localized to nuclei and cytoplasm. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

DLX5 (*distal-less* homeobox 5) is a 33-35 kDa member of the distal-less homeobox family of transcription factors. It is expressed in embryonic mesenchyme where it promotes cartilage and bone formation, and in nervous tissue where it promotes interneuron development. Human DLX5 is 289 amino acids (aa) in length. It contains one DNA-binding homeobox domain (aa 137-196) and two phosphorylation sites at Ser34 and Ser217 that, when utilized, increases transcriptional activity. DLX5 likely forms homodimers, and is known to heterodimerize with MSX-2. Over aa 216-289, human DLX5 shares 99% aa identity with mouse DLX5.