

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human HOXD10 in direct ELISAs.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human HOXD10 Arg153-Thr262 Accession # P28358
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 either lyophilized or as a 0.2 µm filtered solution in PBS.

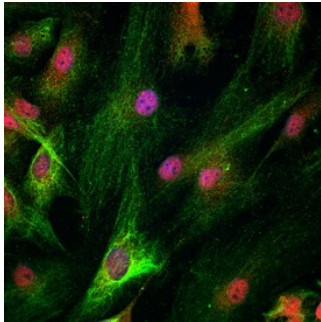
APPLICATIONS

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	5-15 µg/mL	See Below

DATA

Immunocytochemistry



HOXD10 in Human IPS Cells Differentiated to NPCs. HOXD10 was detected in immersion fixed human induced pluripotent stem (iPS) cells differentiated to neural progenitor cells (NPC) using Goat Anti-Human HOXD10 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF10413) at 10 µg/mL, and co-stained with Mouse Anti-Human Nestin Monoclonal Antibody (Catalog # [MAB1259](#)) at 10 µg/mL, for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # [NL001](#)), NorthernLights™ 493-conjugated Anti-Mouse IgG Secondary Antibody (green; Catalog # [NL009](#)) and counterstained with DAPI (blue). Specific staining for HOXD10 was localized to nucleus, while Nestin co-staining was cytoplasmic. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
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

HOXD10 is a sequence-specific transcription factor that belongs to the Abd-B homeobox family. It is a nuclear protein that is expressed in developing limb buds and is involved in differentiation and limb development. HOXD10 mutations have been associated with foot deformities such as rocker-bottom foot and the deformity seen in Charcot-Marie-Tooth disease. HOXD10 also functions as a candidate tumor suppressor. In gastric cancer there is downregulation in gastric cancer tissues and cell lines relative to normal stomach tissues. It has also been reported to suppress ovarian cancer, hepatocellular carcinoma and other cancer cells. Re-expression of HOXD10 results in significant inhibition of cell survival, induction of cell apoptosis and impairment of cell migration and invasion.