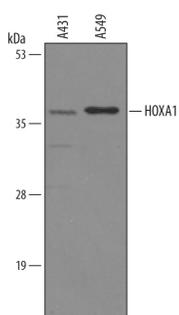
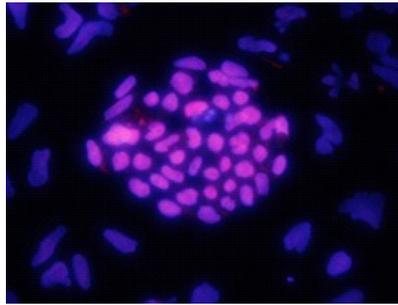


DESCRIPTION	
Species Reactivity	Human
Specificity	Detects human HOXA1 in direct ELISAs and Western blots. In direct ELISAs and Western blots, less than 5% cross-reactivity with recombinant human (rh) HOXB1, rhHOXB4, and rhHOXA9 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human HOXA1 Met1-Asp118 Accession # P49639
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. <i>General Protocols</i> are available in the <i>Technical Information</i> section on our website.		
	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Immunocytochemistry	5-15 µg/mL	See Below

DATA	
<p>Western Blot</p>  <p>Detection of Human HOXA1 by Western Blot. Western blot shows lysates of A431 human epithelial carcinoma cell line and A549 human lung carcinoma cell line. PVDF membrane was probed with 1 µg/mL of Goat Anti-Human HOXA1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5014) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF019). A specific band was detected for HOXA1 at approximately 35 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 8.</p>	<p>Immunocytochemistry</p>  <p>HOXA1 in Ntera-2 Human Cell Line. HOXA1 was detected in immersion fixed retinoic acid-treated Ntera-2 human testicular embryonic carcinoma cell line using 10 µg/mL Goat Anti-Human HOXA1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5014) for 3 hours at room temperature. Cells were stained with the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI (blue). View our protocol for Fluorescent ICC Staining of Cells on Coverslips.</p>

PREPARATION AND STORAGE	
Reconstitution	Reconstitute at 0.2 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

HOXA1 (Homeobox A1; also Hox-1F) is a 35 kDa member of the Antp homeobox family of transcription factors. It is expressed in epithelium and is upregulated by E-cadherin signaling, whereupon it suppresses apoptosis and promotes anchorage dependent growth. Human HOXA1 is 335 amino acids (aa) in length. It contains two poly-His sequences (aa 65-74 and 142-146), a PBX binding segment (aa 204-209) and a DNA binding homeobox domain (aa 229-288). There are multiple splice variants. There is a potential alternate start site at Met6 that may be paired with a nine aa substitution for the C-terminal 117 aa, or a 19 aa substitution for the C-terminal 217 amino acids. Over aa 1-118, human HOXA1 shares 92% and 90% aa identity with mouse and canine HOXA1, respectively.