

DESCRIPTION

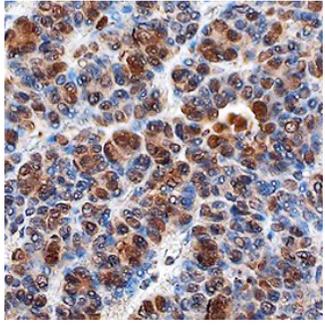
Species Reactivity	Human
Specificity	Detects human PITX2 in direct ELISAs. In direct ELISAs, less than 5% cross-reactivity with recombinant human PITX1 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human PITX2 Ala149-Val317 Accession # Q99697
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
Immunohistochemistry	5-15 µg/mL	See Below

DATA

Immunohistochemistry
 <p>PITX2 in Human Thyroid Cancer Tissue. PITX2 was detected in immersion fixed paraffin-embedded sections of human thyroid cancer tissue using Sheep Anti-Human PITX2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7388) at 3 µg/mL overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using the Anti-Sheep HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS019) and counter-stained with hematoxylin (blue). Specific staining was localized to nuclei. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.</p>

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 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

PITX2 (PITuitary homeoboX 2; also ARP1 and RIEG) is a 33-36 kDa nuclear member of the bicoid subfamily, paired homeobox family of transcription factors. It is widely expressed in the embryo, and serves as the earliest known marker for pituitary gland development. A long isoform commonly called PITX2C also plays a very key role in the establishment of left-right organ asymmetry. PITX2 appears in multiple germ layer derivatives, and it appears that one of its important functions is to integrating retinoic acid and Wnt/β-catenin signaling. The N- and C-terminal regions of PITX2 normally interact noncovalently, rendering PITX2 inactive. Over aa 149-317, human and mouse PITX2 are identical in aa sequence.