Datasheet for ABIN2779637

anti-PITX2 antibody (N-Term)

1 Image | 1 Publication

Go to Product page

Overview

Quantity:	100 µL
Target:	PITX2
Binding Specificity:	N-Term
Reactivity:	Human, Mouse, Horse, Guinea Pig
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PITX2 antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Immunogen:	The immunogen is a synthetic peptide directed towards the N terminal region of human PITX2
Sequence:	METNCRKLVS ACVQLGVQPA AVECLFSKDS EIKKVEFTDS PESRKEAASS
Predicted Reactivity:	Guinea Pig: 92%, Horse: 100%, Human: 100%, Mouse: 93%
Characteristics:	This is a rabbit polyclonal antibody against PITX2. It was validated on Western Blot using a cell lysate as a positive control.
Purification:	Affinity Purified

Target Details

Target:	PITX2
Alternative Name:	PITX2 (PITX2 Products)

Target Details

Background:	The PITX2 gene encodes a member of the RIEG/PITX homeobox family, which is in the bicoid class of homeodomain proteins. This protein acts as a transcription factor and regulates procollagen lysyl hydroxylase gene expression. Mutations in PITX2 are associated with Axenfeld-Rieger syndrome (ARS), iridogoniodysgenesis syndrome (IGDS), and sporadic cases of Peters anomaly. This protein is involved in the development of the eye, tooth and abdominal organs. It also acts as a transcriptional regulator involved in basal and hormone-regulated activity of prolactin. This gene encodes a member of the RIEG/PITX homeobox family, which is in the bicoid class of homeodomain proteins. The encoded protein acts as a transcription factor and regulates procollagen lysyl hydroxylase gene expression. This protein plays a role in the terminal differentiation of somatotroph and lactotroph cell phenotypes, is involved in the development of the eye, tooth and abdominal organs, and acts as a transcriptional regulator involved in basal and hormone-regulated activity of prolactin. Mutations in this gene are associated with Axenfeld-Rieger syndrome, iridogoniodysgenesis syndrome, and sporadic cases of Peters anomaly. A similar protein in other vertebrates is involved in the determination of left-right asymmetry during development. Alternatively spliced transcript variants encoding distinct isoforms have been described. Alias Symbols: ARP1, Brx1, IDG2, IGDS, IGDS2, IHG2, IRID2, MGC111022, MGC20144, Otlx2, PTX2, RGS, RIEG, RIEG1, RS Protein Interaction Partner: LEF1, Hoxa1, WDR5, SMAD3, HDAC1, CTNNB1, ZNHIT3, TRIM25, HERC5, PDLIM1, PITX2, PROP1, KAT5, Pou1f1, MSX2, Protein Size: 317
Molecular Weight:	35 kDa
Gene ID:	5308
NCBI Accession:	NM_153426, NP_700475
UniProt:	Q99697
Pathways:	Retinoic Acid Receptor Signaling Pathway, Regulation of Muscle Cell Differentiation, Skeletal Muscle Fiber Development

Application Details

Application Notes:	Optimal working dilutions should be determined experimentally by the investigator.
Comment:	Antigen size: 317 AA
Restrictions:	For Research Use only

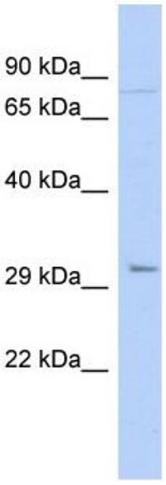
Handling

Format:	Liquid
Concentration:	Lot specific
Buffer:	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09 % (w/v) sodium azide and 2 % sucrose.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-20 °C
Storage Comment:	For short term use, store at 2-8°C up to 1 week. For long term storage, store at -20°C in small aliquots to prevent freeze-thaw cycles.

Publications

Product cited in:	Holmberg, Ingner, Johansson, Leander, Hjalt: "PITX2 gain-of-function induced defects in mouse forelimb development." in: **BMC developmental biology**, Vol. 8, pp. 25, (2008) (PubMed).

Images



Western Blotting

Image 1. WB Suggested Anti-PITX2 Antibody Titration: 0.2-1 ug/ml ELISA Titer: 1:62500 Positive Control: COLO205 cell lysate PITX2 is supported by BioGPS gene expression data to be expressed in COLO205