

Datasheet for ABIN7603131
anti-PITX2 antibody (N-Term)



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Overview

Quantity:	100 µg
Target:	PITX2
Binding Specificity:	N-Term
Reactivity:	Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PITX2 antibody is un-conjugated
Application:	Western Blotting (WB), Flow Cytometry (FACS)

Product Details

Purpose:	Anti-PITX2/RGS Antibody Picoband®
Immunogen:	A synthetic peptide corresponding to a sequence at the N-terminus of human PITX2/RGS, identical to the related mouse and rat sequences.
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins.
Characteristics:	Anti-PITX2/RGS Antibody Picoband® (ABIN7603131). Tested in Flow Cytometry, WB applications. This antibody reacts with Mouse. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Purification:	Immunogen affinity purified.

Target Details

Target:	PITX2
Alternative Name:	PITX2 (PITX2 Products)
Background:	Synonyms: Pituitary homeobox 2, ALL1-responsive protein ARP1, Homeobox protein PITX2, Paired-like homeodomain transcription factor 2, RIEG bicoid-related homeobox transcription factor, Solurshin, PITX2, ARP1, RGS, RIEG, RIEG1 Tissue Specificity: Isoform 1 is expressed in neurons of the cerebellum and hippocampus. Isoform 2 is expressed in thymus, spleen and lung. Background: Paired-like homeodomain transcription factor 2?also known as?pituitary homeobox 2?is a?protein?that in humans is encoded by the?PITX2?gene. It is mapped to 4q25. 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.
Molecular Weight:	35 kDa
Gene ID:	5308
UniProt:	Q99697
Pathways:	Retinoic Acid Receptor Signaling Pathway , Regulation of Muscle Cell Differentiation , Skeletal Muscle Fiber Development

Application Details

Application Notes:	Western blot, 0.25-0.5 µg/mL, Human, Mouse Flow Cytometry (Fixed), 1-3 µg/1x10⁶ cells, Human 1. Arakawa H, Nakamura T, Zhadanov AB, Fidanza V, Yano T, Bullrich F, Shimizu M, Blechman J, Mazo A, Canaani E, Croce CM (Apr 1998). "Identification and characterization of the ARP1 gene, a target for the human acute leukemia ALL1 gene". Proceedings of the National Academy of Sciences of the United States of America. 95 (8): 4573-8. 2. L'honoré A, Ouimette JF, Lavertu-Jolin M, Drouin J (Nov 2010). "Pitx2 defines alternate pathways acting through MyoD during
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Application Details

limb and somitic myogenesis". Development. 137 (22): 3847-56. 3. Héon E, Sheth BP, Kalenak JW, Sunden SL, Streb LM, Taylor CM, Alward WL, Sheffield VC, Stone EM (Aug 1995). "Linkage of autosomal dominant iris hypoplasia to the region of the Rieger syndrome locus (4q25)". Human Molecular Genetics. 4 (8): 1435-9.

Restrictions: For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4, 0.05 mg Sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.