

Product Information

Anti-Pitx2 (Ptx2)

Developed in Rabbit, Affinity isolated antibody

Product Number **P 0998**

Product Description

Anti-Pitx2 (Ptx2) is developed in rabbit using as immunogen a synthetic peptide, DPSKKKRQRRQ-RTHF corresponding to human Pitx2 (Ptx2) (amino acids 78-92) conjugated to BSA. The antibody is affinity-purified using the immunizing peptide immobilized on resin.

Anti-Pitx2 (Ptx2) specifically recognizes Pitx2 (Ptx2) by immunoblotting (35.4 kDa) and immunohistochemistry. The antibody recognizes human and rodent Pitx2 (Ptx2). Other species reactivity has not been confirmed.

Pitx2 (Ptx2), also referred to as paired-like homeo-domain transcription factor 2, pituitary homeobox 2, rieg bicoid-related homeobox transcription factor 1 (RIEG1), all1-responsive gene 1, and ARP1, belongs to the paired homeobox family of transcription factors and contains one homeobox domain.¹⁻³ Pitx2 (Ptx2) regulates procollagen lysyl hydroxylase gene expression and may be involved in the development and maintenance of anterior structures.

Reagent

The antibody is provided as affinity isolated antibody in a 50% ammonium sulfate suspension in phosphate buffered saline, containing no additional preservatives.

Preparation Instructions

Method 1 for immunostaining and immunoblotting (Western blot)

1. Carefully resuspend antibody pellet to uniformity.
2. Remove a fixed amount of suspension and dissolve 1:10 in PBS or TBS to yield a 100 µg/ml solution.

Method 2 for immunoprecipitation, supershift, immunostaining and immunoblotting (Western blot)

1. Pellet antibodies at 10,000 – 15,000 x g for 10 minutes at 2 to 8 °C using a microcentrifuge.
2. Carefully remove as much supernatant as possible. It is not necessary to remove all the ammonium sulfate solution; a small residual amount will not effect the antibody preparation. Dissolve the pellet (antibody) in small volume (100 µL) of PBS (or TBS) at final concentration of 1 mg/ml (100 µg/100 µl). Do not allow the pellet to dry out. This can cause loss of activity. Gently allow pellet to dissolve at least 1 hour before use. Do not vortex. Mix by finger-tapping or gentle stirring.

Notes:

- Reconstituted antibody may be stored at 2 to 8 °C for up to one month. Addition of a preservative (15 mM sodium azide) may be necessary.
- For extended storage, add an equal volume of high purity glycerol, to a final concentration of 50% and BSA to a final concentration of 1% and store at –20 °C.
- During shipment, small volumes will occasionally become entrapped in the seal of the product vial. We recommend briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.

Storage/Stability

Store ammonium sulfate suspension at 2-8 °C for up to one month.

For extended storage, freeze in working aliquots.

Reconstituted and diluted antiserum should be stored in aliquots at -20 °C.

Product Profile

Recommended dilutions are 1:200 to 1:1,000 for immunoblotting and immunohistochemistry.

Note: In order to obtain the best results and assay sensitivity in various techniques and preparations, we recommend determining optimal working dilutions by titration.

References

1. Semina, E.V., et al., Cloning and characterization of a novel bicoid-related homeobox transcription factor gene, RIEG, involved in Rieger syndrome. *Nat. Genet.*, **14**, 392-399 (1996).
2. Arakawa, H., et al., Identification and characterization of the ARP1 gene, a target for the human acute leukemia ALL1 gene. *Proc. Natl. Acad. Sci. USA.*, **95**, 4573-4578 (1998).
3. Alwrd, W.L.M., et al., Autosomal dominant iris hypoplasia is caused by a mutation in the Rieger syndrome (RIEG/PITX2) gene. *Am. J. Ophthalmol.*, **125**, 98-100 (1998).

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