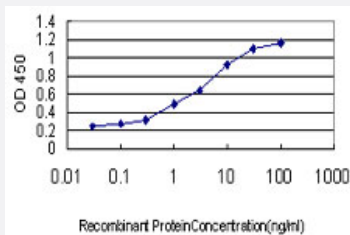


PITX2 monoclonal antibody (M01), clone 2G6

Catalog # H00005308-M01

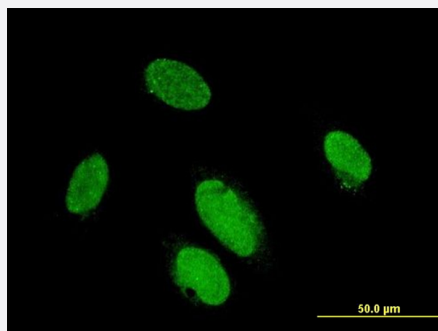
Size 100 ug

Applications



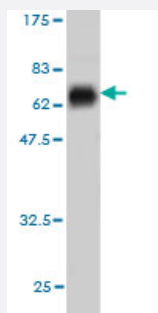
Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged PITX2 is approximately 0.03ng/ml as a capture antibody.



Immunofluorescence

Immunofluorescence of monoclonal antibody to PITX2 on HeLa cell . [antibody concentration 10 ug/ml]



Western Blot detection against Immunogen (61.38 KDa) .

Specification

Product Description

Mouse monoclonal antibody raised against a full length recombinant PITX2.

Immunogen	PITX2 (AAH13998, 1 a.a. ~ 324 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Sequence	MNCMKGPLHLEHRAAGTKLSAVSSSSCHHPQPLAMASVLAPGQPRSLDSSKHRLEVHTISDTSSPEAAEKDKSQQGKNEDVGAEDPSKKKRQRRQRTHFTSQQLQELEATFQRNRYPD MSTREEIAVWTNLTEARVRVWFKNRRAKWRKRERNQQAELCKNGFGPQFNGLMQPYDDMYPGYSYNNWAAKGLTSASLSTKSFPFFNSMNVNPLSSQSMFSPNSISSMSMSSSMVPSAVTGVPGSSLNSLNNLNLSSPSLNSAVPTPACPYAPPTPPYVYRDTCNSSLASLRLKAKQHSSFGYASVQNPASNLSACQYAVDRPV
Host	Mouse
Reactivity	Human
Isotype	IgG2a Kappa
Quality Control Testing	Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (61.38 KDa) .
Storage Buffer	In 1x PBS, pH 7.4
Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot (Recombinant protein)

[Protocol Download](#)

- Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged PITX2 is approximately 0.03ng/ml as a capture antibody.

[Protocol Download](#)

- ELISA

- Immunofluorescence

Immunofluorescence of monoclonal antibody to PITX2 on HeLa cell . [antibody concentration 10 ug/ml]

Gene Info — PITX2

Entrez GeneID [5308](#)

GeneBank Accession# [BC013998](#)

Protein Accession#	AAH13998
Gene Name	PITX2
Gene Alias	ARP1, Brx1, IDG2, IGDS, IGDS2, IHG2, IRID2, MGC111022, MGC20144, Otlx2, PTX2, RGS, RIEG, RIEG1, RS
Gene Description	paired-like homeodomain 2
Omim ID	137600 180500 180550 601542
Gene Ontology	Hyperlink
Gene Summary	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. [provided by RefSeq]
Other Designations	OTTHUMP00000163736 all1-responsive gene 1 paired-like homeodomain transcription factor 2 pituitary homeo box 2 rieg bicoid-related homeobox transcription factor 1 solarshin

Publication Reference

- [Fabrication of functional ameloblasts from hiPSCs for dental application.](#)

Ka-Hwa Kim, Eun-Jung Kim, Hyun-Yi Kim, Shujin Li, Han-Sung Jung.

Frontiers in Cell and Developmental Biology 2023 Jun; 11:1164811.

Application: IF, Human, human-induced pluripotent stem cells

- [TWIST1, a gene associated with Saethre-Chotzen syndrome, regulates extraocular muscle organization in mouse.](#)

Mary C. Whitman, Nicole M. Gilette, Jessica L. Bell, Seoyoung A. Kim, Max Tischfield, Elizabeth C. Engle.

Developmental Biology 2022 Oct; 490:126.

Application: IF, Mouse, Mouse extraocular muscles

- [Mechanotransductive Differentiation of Hair Follicle Stem Cells Derived from Aged Eyelid Skin into Corneal Endothelial-Like Cells.](#)

Christian Olszewski, Jessika Maassen, Rebecca Guenther, Claudia Skazik-Voogt, Angela Gutermuth.

Stem Cell Reviews and Reports 2022 Jun; 18(5):1668.

Application: IF, Human, Human hair follicle derived stem cells

- [Directed differentiation of periocular mesenchyme from human embryonic stem cells.](#)

Lovatt M, Yam GH, Peh GS, Colman A, Dunn NR, Mehta JS.

Differentiation 2018 Jan; 99:62.

Application: WB-Ce, Human, Human embryonic stem cells

- [PITX2 is involved in stress response in cultured human trabecular meshwork cells through regulation of SLC13A3.](#)

Strungaru MH, Footz T, Liu Y, Berry FB, Belleau P, Semina EV, Raymond V, Walter MA.

Investigative Ophthalmology & Visual Science 2011 Nov; 10(11):M111.01170.

Application: ChIP, Human, Non-pigmented ciliary epithelium cells

- [Human PRKC Apoptosis WT1 Regulator Is a Novel PITX2-interacting Protein That Regulates PITX2 Transcriptional Activity in Ocular Cells.](#)

Acharya M, Lingenfelter DJ, Huang L, Gage PJ, Walter MA.

The Journal of Biological Chemistry 2009 Oct; 284(50):34829.

Application: IP-WB, Human, COS-7, HTM cells

Pathway

- [TGF-beta signaling pathway](#)

Disease

- [Alcoholism](#)
- [Atrial Fibrillation](#)
- [Cardiovascular Diseases](#)
- [Cleft Lip](#)
- [Cleft Palate](#)
- [Diabetes Mellitus](#)
- [Edema](#)
- [Genetic Predisposition to Disease](#)
- [Glaucoma](#)

- [Recurrence](#)