

# PITX2 Knockout HeLa Cell Lysate, Homozygous

**Catalog No.:** RM50038

## Basic Information

**Catalog No.**

RM50038

**Category**

Cell Lysate

**Parental Cell line**

HeLa

**Genotype**

Knockout

## Gene Information

**Gene Symbol**

PITX2

**Species**

Human

**Gene ID**

5308

**Swiss Prot**

Q99697

**Synonyms**RS; RGS; ARP1; Brx1; IDG2; IGDS; IHG2;  
PTX2; RIEG; ASGD4; IGDS2; IRID2; Otlx2;  
RIEG1; Pituitary homeobox 2 (PITX2)

## Contact

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## Background

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.

## Product Information

**Description**

PITX2 Knockout cell line is engineered from HeLa cell line with Gene-Editing Technology.

Allele-1:139bp deletion in exon2

Allele-2:154bp deletion in exon2

Mammalian cells such as human, rat and mouse cells are normally diploid with two alleles. Homozygote: both alleles were knocked out, mRNA has no signal, no expression of proteins. Heterozygote: only one allele was knocked out, the mRNA transcript levels was decreased compared to wild type, and the protein expression levels was also lower than that of the wild type.

**Packaging**

1 vial parental cell Lysate and 1 vial knockout cell Lysate

**Shipping Conditions**

4°C

**Amount**

50µL, 2µg/µL.

**Storage**

Lysate is stable for 12 months when stored at -20°C. Minimizing freeze-thaw cycles.

**Protocol**

To be used as WB control. Lysate is supplied in 1× SDS sample buffer (2% SDS, 60 mM Tris-HCl pH 6.8, 10% Glycerol, 0.02% Bromophenol blue, 60 mM beta-mercaptoethanol). Lysate should be boiled for 3 - 5 minutes before loading onto gel.

## Sequencing data

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WT TCTAAGAAGAAGCG\*\*\*\*\*ATCTCAGAGCTGG  
Mut TCTAAGAAGAAGCG\*\*\*Deletion\*\*\*ATCTCAGAGCTGG  
Allele-1: 139bp deletion in exon2

WT GCGCGGAGGACCC\*\*\*\*\*AATGTGGAAGGCAG  
Mut GCGCGGAGGACCC\*\*\*Deletion\*\*\*AATGTGGAAGGCAG  
Allele-2: 154bp deletion in exon2

Genome sequence analysis of PCR products from parental (WT) and PITX2 knockout (KO) HeLa cells, using sanger sequencing.