## **Product Datasheet**

## Mouse Pituitary homeobox 2 (PITX2) ELISA Kit

Catalog No: #EK8494

Package Size: #EK8494-1 48T #EK8494-2 96T



Orders: order@signalwayantibody.com Support: tech@signalwayantibody.com

Description	
Product Name	Mouse Pituitary homeobox 2 (PITX2) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Mouse (Mus musculus)
Other Names	ARP1; Brx1; IDG2; IGDS; IGDS2; IHG2; IRID2; MGC111022; MGC20144; Otlx2; PTX2; RGS; RIEG; RIEG1;
	RS; OTTHUMP00000163736 all1-responsive gene 1 paired-like homeodomain transcription factor 2 pituitary
Accession No.	P97474
Uniprot	P97474
GeneID	18741;
Storage	The stability of ELISA kit is determined by the loss rate of activity. The loss rate of this kit is less than 5%
	within the expiration date under appropriate storage condition.
	The loss rate was determined by accelerated thermal degradation test. Keep the kit at 37C for 4 and 7 days,
	and compare O.D.values of the kit kept at 37C with that of at recommended temperature. (referring from China
	Biological Products Standard, which was calculated by the Arrhenius equation. For ELISA kit, 4 days storage
	at 37C can be considered as 6 months at 2 - 8C, which means 7 days at 37C equaling 12 months at 2 - 8C).

## **Application Details**

Detect Range:23.44-1500 pg/mL		
Sensitivity:5.8 pg/mL		
Sample Type:Serum, Plasma, Other biological fluids		
Sample Volume: 1-200 μL		
Assay Time:1-4.5h		
Detection wavelength:450 nm		

## **Product Description**

Detection Method:SandwichTest principle:This assay employs a two-site sandwich ELISA to quantitate PITX2 in samples. An antibody specific for PITX2 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyPITX2 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for PITX2 is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of PITX2 bound in the initial step. The color development is stopped and the intensity of the color is measured. Product Overview: PITX2 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 this gene are associated with Axenfeld-Rieger syndrome (ARS), iridogoniodysgenesis syndrome (IGDS), and sporadic cases of Peters anomaly. This protein plays a role in the terminal differentiation of somatotroph and lactotroph cell phenotypes. This protein is involved in the development of the eye, tooth and abdominal organs. This protein acts as a transcriptional regulator involved in basal and hormone-regulated activity of prolactin. A similar protein in other vertebrates is involved in the determination of left-right asymmetry during development.

Note: This product is for in vitro research use only