SunLong Biotech Co.,LTD
Tel: 0086-571- 56623320 Fax:0086-571- 56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

Rabbit Anti-POD1 antibody

SL8688R

Product Name:	POD1
Chinese Name:	足细胞表达蛋白/转录因子21抗体
Alias:	bHLHa23; Capsulin; Class A basic helix-loop-helix protein 23; Epicardin; POD 1; Pod-1; POD1; Podocyte expressed 1; Podocyte-expressed 1; TCF-21; TCF21; tcf21 ; TCF21_HUMAN; Transcription factor 21.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Pig,Cow,Horse,Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	20 kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human TCF-21:41-410/179
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	The basic helix-loop-helix (bHLH) class of transcription factors govern cell fate determination by controlling a variety of cellular differentiation processes. POD-1 (podocyte-expressed 1, also designated capsulin or epicardin) is a nuclear bHLH protein that is involved in the specification of select mesodermal cell populations associated with heart, cranial skeletal muscle, gut and urogenital system. POD-1 is selectively

expressed in mesenchymal cells at sites of epithelial-mesenchymal interaction in the kidney, lung, intestine, pancreas and the epicardium, which gives rise to the coronary arteries. This epithelial-mesenchymal interaction is involved in the formation of numerous internal organs. POD-1 is also expressed in the mesothelium that gives rise to the spleen and in cells that give rise to smooth muscle. In addition to its role in kidney morphogenesis and spleen organogenesis, POD-1 may play a role in the development and sex determination of the mammalian gonad.

Function:
Involved in epithelial-mesenchymal interactions in kidney and lung morphogenesis that include epithelial differentiation and branching morphogenesis. May play a role in the specification or differentiation of one or more subsets of epicardial cell types.

Subunit:
Efficient DNA binding requires dimerization with another bHLH protein. Forms a heterodimer with TCF3 and binds the E box (5'-CANNTG-3').

Subcellular Location:
Nucleus.

Similarity:
Contains 1 basic helix-loop-helix (bHLH) domain.

SWISS:
O43680

Gene ID:
6943

Database links:

Entrez Gene: 421697Chicken

Entrez Gene: 510873Cow

Entrez Gene: 6943Human

Entrez Gene: 21412Mouse

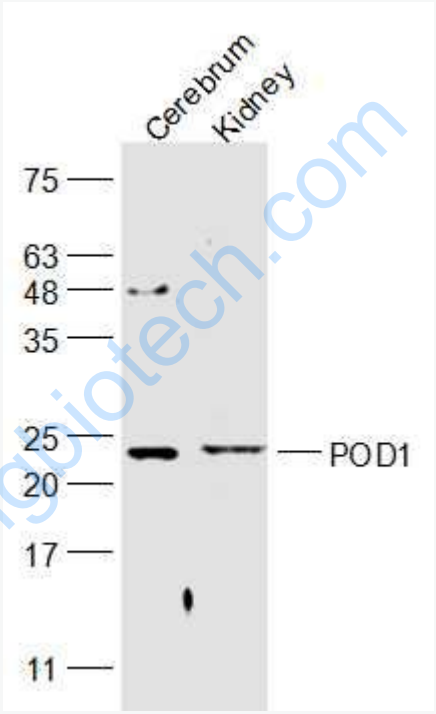
Entrez Gene: 252856Rat

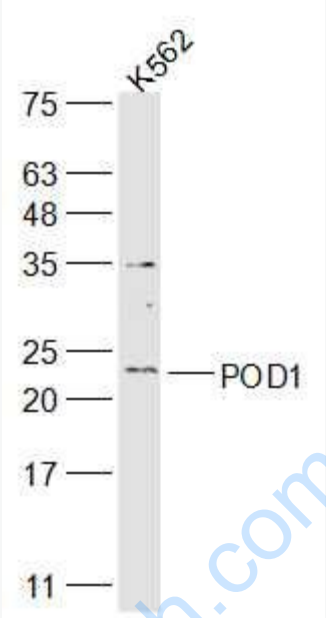
Omim: 603306Human

SwissProt: Q5E9S3Cow

SwissProt: O43680Human

SwissProt: O35437Mouse

	Unigene: 78061Human Unigene: 16497Mouse **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Picture:	 Sample: Cerebrum (Mouse) Lysate at 40 ug Kidney (Rat) Lysate at 40 ug Primary: Anti-POD1 (SL8688R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 20 kD Observed band size: 23 kD



Sample:

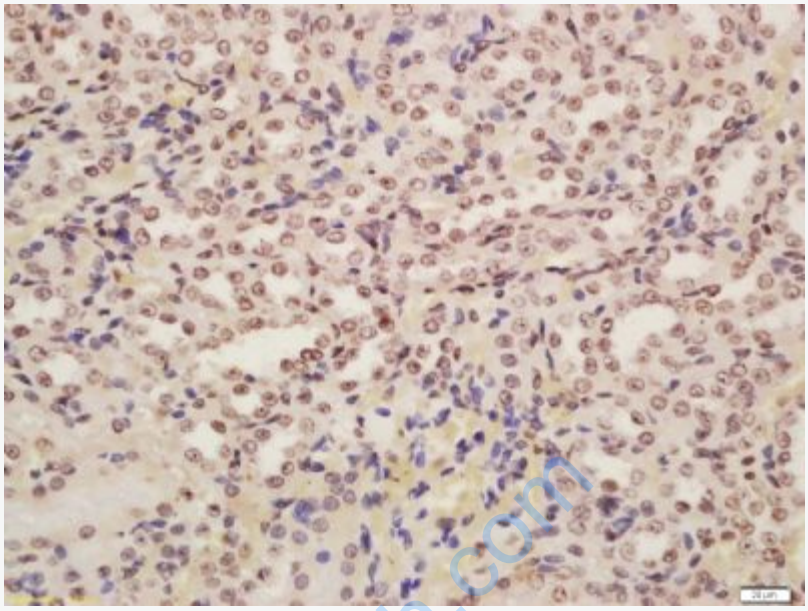
K562(Human) Cell Lysate at 30 ug

Primary: Anti-POD1 (SL8688R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

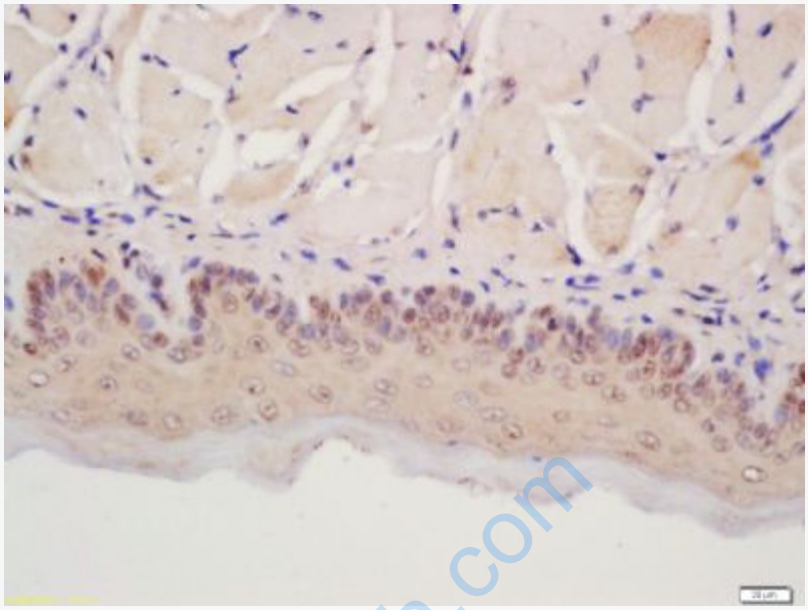
Predicted band size: 20 kD

Observed band size: 23 kD



Tissue/cell: Rat kidney tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;

Incubation: Anti- POD1 Polyclonal Antibody, Unconjugated(SL8688R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: rat tongue tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;

Incubation: Anti-POD1 Polyclonal Antibody, Unconjugated(SL8688R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining