



Rabbit Anti-HAND1 antibody

SL9459R

Product Name:	HAND1
Chinese Name:	心脏和神经嵴衍生蛋白1抗体
Alias:	autonomic nervous system and neural crest derivatives-expressed protein 1; heart; Basic helix loop helix transcription factor HAND1; Class A basic helix-loop-helix protein 27; Extraembryonic tissues; Extraembryonic tissues heart autonomic nervous system and neural crest derivatives expressed protein 1; HAND 1; HAND1; HAND-1; HAND1_HUMAN; Heart and neural crest derivatives expressed 1; Heart and neural crest derivatives expressed protein 1; Heart-and neural crest derivatives-expressed protein 1; Hxt; Thing 1; Thing1.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Rabbit,Sheep,Dog,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:50-200 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	24kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human HAND1:101-200/215
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:	Transcription factor that plays an essential role in both trophoblast-giant cells

differentiation and in cardiac morphogenesis. In the adult, could be required for ongoing expression of cardiac-specific genes. dHAND (for deciduum, heart, autonomic nervous system and neural crest derivatives; also designated HAND2) and eHAND (also designated HAND1, HXT or Thing1) are members of a subclass of basic-helix-loop-helix transcription factors that are involved in cardiac development. dHAND and eHAND are expressed in the heart after cardiac looping, and they participate in left-right cardiac asymmetry. dHAND is expressed predominantly on the right side of the looped heart tube and in the pulmonary ventricle, where it activates transcription of various genes, including Ufd1 (for ubiquitin fusion degradation) and Cdc45. In addition, dHAND is expressed in sympathetic neurons and chromaffin cells throughout embryonic and fetal development and mediates neural crest development. eHAND expression is primarily observed on the left side and in the systemic ventricle, suggesting that these proteins are involved in the development of segments of the heart tube, which give rise to specific heart chambers during cardiogenesis.

Function:

Transcription factor that plays an essential role in both trophoblast-giant cells differentiation and in cardiac morphogenesis. In the adult, could be required for ongoing expression of cardiac-specific genes. Binds the DNA sequence 5'-NRTCTG-3' (non-canonical E-box) (By similarity).

Subunit:

Efficient DNA binding requires dimerization with another bHLH protein. Forms homodimers and heterodimers with TCF3 gene products E12 and E47, HAND2 and HEY1, HEY2 and HEYL (hairy-related transcription factors). Interacts with MDFIC (By similarity).

Subcellular Location:

Nucleus.

Tissue Specificity:

Heart.

Post-translational modifications:

Phosphorylation by PLK4 disrupts the interaction with MDFIC and leads to translocation into the nucleoplasm, allowing dimerization and transcription factor activity (By similarity).

Similarity:

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

SWISS:

O96004

Gene ID:

9421

Database links:

[Entrez Gene: 9421](#)Human

[Entrez Gene: 59112](#)Rat

[Ovim: 602406](#)Human

[SwissProt: O96004](#)Human

[SwissProt: P57100](#)Rabbit

[SwissProt: P97832](#)Rat

[SwissProt: Q28555](#)Sheep

[Unigene: 152531](#)Human

[Unigene: 224598](#)Rat

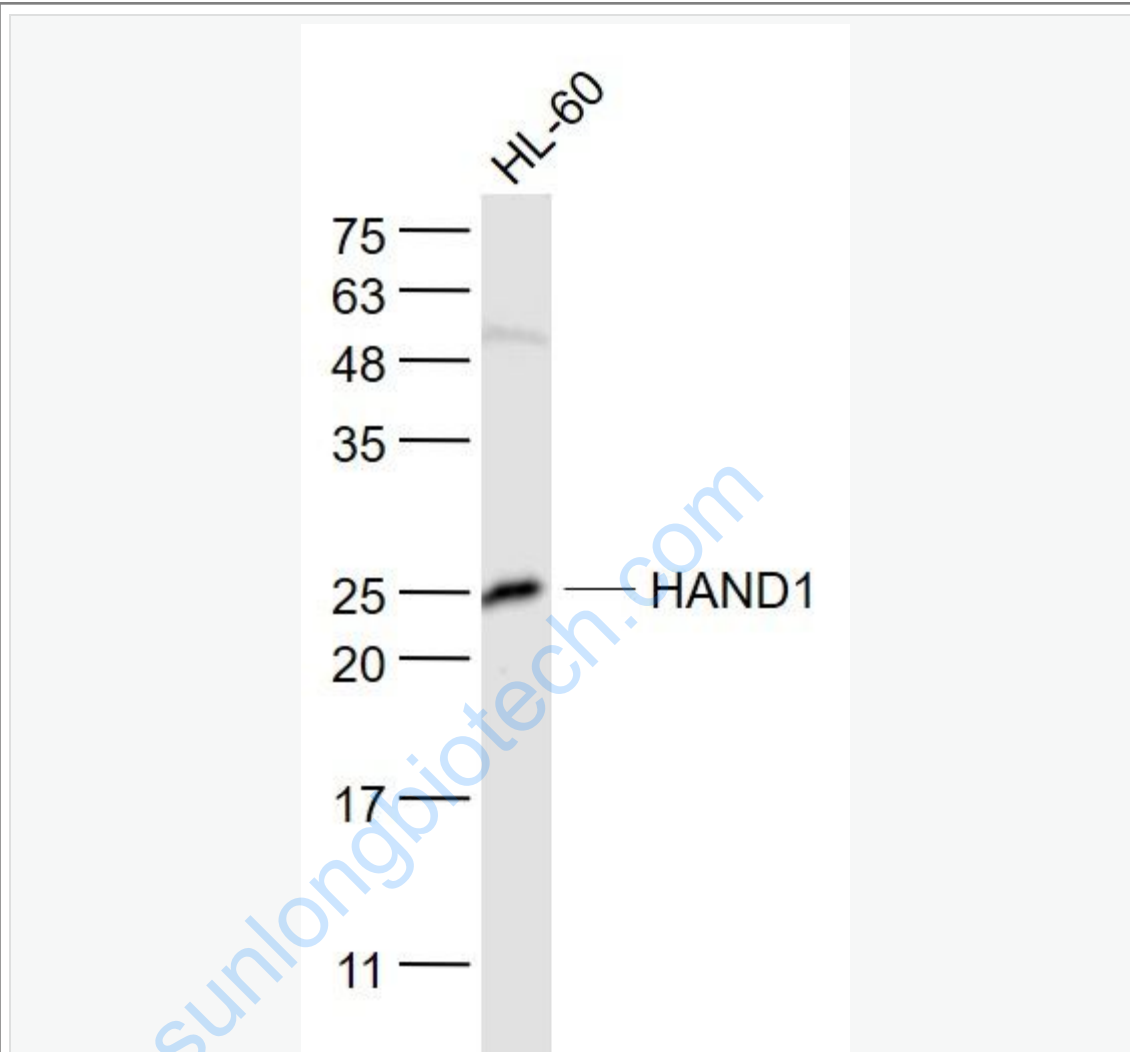
[Unigene: 39340](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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Picture:



Sample:

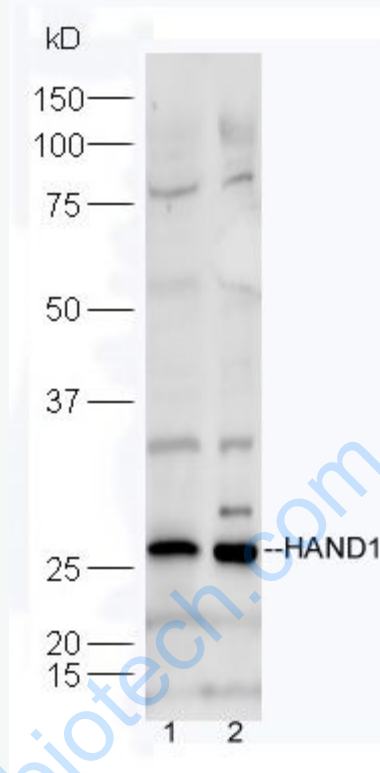
HL-60(Human) Cell Lysate at 30 ug

Primary: Anti- HAND1 (SL9459R) at 1/1000 dilution

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

Predicted band size: 24 kD

Observed band size: 25 kD



Sample:

Placenta (Mouse) Lysate at 40 ug

HL-60 Cell (Human) Lysate at 40 ug

Primary: Anti-HAND1 (SL9459R) at 1/300 dilution

Secondary: HRP conjugated Goat-Anti-rabbit IgG (SL9459R) at 1/5000 dilution

Predicted band size: 24 kD

Observed band size: 26 kD