



## Rabbit Anti-MNX1/HLXB9 antibody

SL11320R

<b>Product Name:</b>	MNX1/HLXB9
<b>Chinese Name:</b>	运动神经元及胰腺同源蛋白1抗体
<b>Alias:</b>	HB9/HLXB9; HB 9; HB9; HLXB 9; HLXB9; Homeo box HB9; Homeobox HB9; Homeobox protein HB9; HOXHB9; MNX1; MNX1_HUMAN; Motor neuron and pancreas homeobox protein 1; Sacral agenesis autosomal dominant (Currarino triad); SCRA 1; SCRA1; SCRA1; HOXHB9.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Rabbit,
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1ug/testICC=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.
<b>Molecular weight:</b>	41kDa
<b>Cellular localization:</b>	The nucleus
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human HLXB9:231-330/401
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	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.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	The HB9 homeobox transcription factor regulates gene expression during embryonic development and also in specific adult tissues. HB9 gene mutations are implicated in Curriano syndrome, which is characterized by a triad consisting of a presacral tumor, sacral agenesis and anorectal malformation. In human bone marrow cells, HB9

expression directly correlates with CD34 expression. Furthermore, HB9 expression increases in CD34+ cells that are treated with IL-3 and granulocyte macrophage-colony-stimulating factor. Early in murine development, HB9 is expressed in pancreatic buds (dorsal and ventral) with subsequent expression in differentiating beta cells in the islets of Langerhans. The dorsal lobe of the pancreas fails to form in HB9(-) mice; the resultant pancreas has smaller islets of Langerhans and less beta cells than normal pancreas. The HB9 gene is expressed in the human adult pancreas. In the developing vertebrate embryo, the HB9 gene plays an essential role in motor neuron differentiation. The motor columns of HB9(-) mice are disorganized, lacking phrenic and abducens nerves and exhibiting intercostal nerve defects.

**Function:**

Putative transcription factor involved in pancreas development and function.

**Subcellular Location:**

Nucleus.

**Tissue Specificity:**

Expressed in lymphoid and pancreatic tissues.

**DISEASE:**

Defects in MNX1 are a cause of Currarino syndrome (CURRAS) [MIM:176450]. The triad of a presacral tumor, sacral agenesis and anorectal malformation constitutes the Currarino syndrome which is caused by dorsal-ventral patterning defects during embryonic development. The syndrome occurs in the majority of patients as an autosomal dominant trait.

**Similarity:**

Contains 1 homeobox DNA-binding domain.

**SWISS:**

P50219

**Gene ID:**

3110

**Database links:**

[Entrez Gene: 3110](#) Human

[Entrez Gene: 15285](#) Mouse

[Omim: 142994](#) Human

[SwissProt: P50219](#) Human

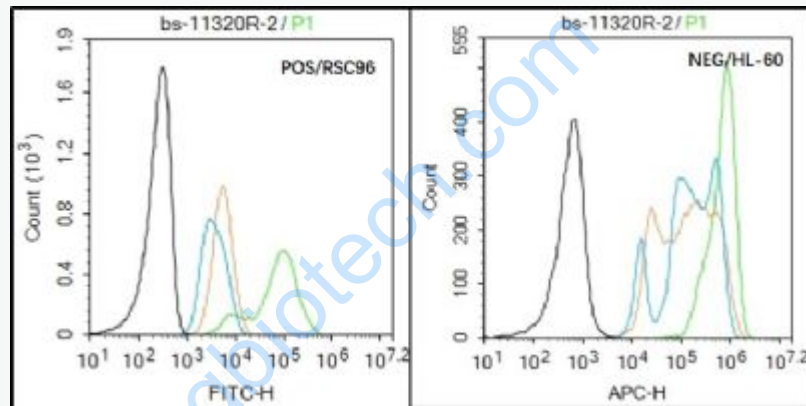
[SwissProt: Q9QZW9](#) Mouse

[Unigene: 37035](#) Human

[Unigene: 103760](#) Mouse

**Important Note:**

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



Black line : Positive blank control (RSC96); Negative blank control (HL60)

Green line : Primary Antibody (Rabbit Anti- HLXB9 antibody (SL11320R) )

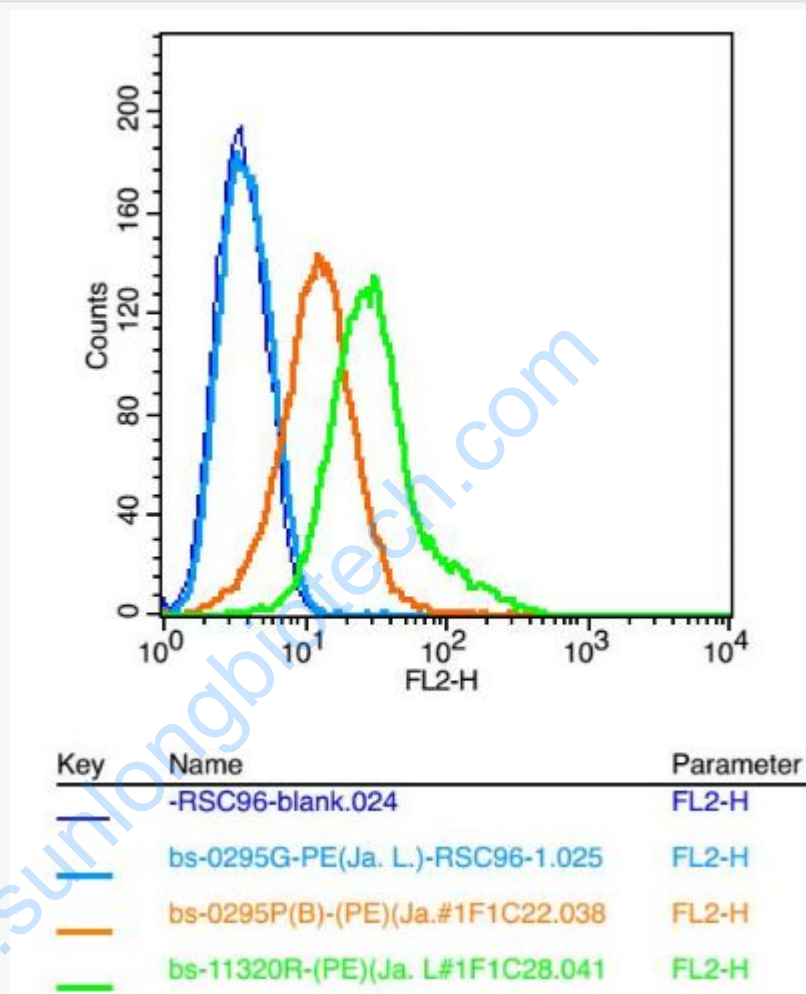
Orange line : Isotype Control Antibody (Rabbit IgG) .

Blue line : Secondary Antibody (Goat anti-rabbit IgG-AF488)

RSC96 (Positive) and HL60 (Negative control) cells (black) were fixed with 4% PFA for 10 min at room temperature, permeabilized with 90% ice-cold methanol for 20 min at -20°C, and incubated in 5% BSA blocking buffer for 30 min at room temperature. Cells were then stained with HLXB9 Antibody (SL11320R) at 1:50 dilution in blocking buffer and incubated for 30 min at room temperature, washed twice with 2% BSA in PBS, followed by secondary antibody (blue) incubation for 40 min at room temperature. Acquisitions of 20,000 events were performed. Cells

**Picture:**

stained with primary antibody (green), and isotype control (orange).



Positive control: RSC96

Isotype Control Antibody: Rabbit IgG ; Secondary Antibody: Goat anti-rabbit IgG-FITC, Dilution: 1:100 in 1 X PBS containing 0.5% BSA ; Primary Antibody Dilution: 6µg in 100 µL 1X PBS containing 0.5% BSA.