



## Rabbit Anti-SIP1 antibody

SL9186R

<b>Product Name:</b>	SIP1
<b>Chinese Name:</b>	Smad蛋白相互作用蛋白1抗体
<b>Alias:</b>	Smad Interacting Protein 1 SIP 1; SIP1 SIP-1; Smad-interacting protein 1; SMADIP 1; SMADIP1; ZEB 2; ZEB2; ZEB2_HUMAN; Zfhx1b; ZFHX1B protein; Zfx1b; Zinc finger E box binding protein 2; Zinc finger E-box-binding homeobox 2; Zinc finger homeobox 1b; zinc finger homeobox protein 1; Zinc finger homeobox protein 1b.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Chicken,Dog,Horse,
<b>Applications:</b>	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=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>	136kDa
<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 SIP1:951-1100/1214
<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>	SMAD regulates gene expression by interacting with different classes of transcription factors including DNA-binding multi-zinc finger proteins. SIP1, for SMAD interacting protein 1, is a member of the delta-EF1/Zfh1 family of 2-handed zinc finger/homeodomain proteins. SIP1 contains a SMAD-binding domain, a homeodomain

and two clusters of zinc fingers on the N- and C-termini. SIP1, also known as SMADIP1, ZFH1B and ZEB2 (zinc finger E-box-binding protein 2), can be induced by TGF $\beta$  treatment. SIP1 plays a crucial role in normal embryonic development of neural structures and the neural crest. The human SIP1 gene maps to chromosome 2q22. Mutations in the SIP1 gene cause a form of Hirschsprung disease (HSCR). Patients with SIP1 mutations show mental retardation, delayed motor development, epilepsy, microcephaly, distinct facial features and/or congenital heart disease—all symptoms of HSCR.

**Function:**

Transcriptional inhibitor that binds to DNA sequence 5'-CACCT-3' in different promoters. Represses transcription of E-cadherin.

**Subunit:**

Binds activated SMAD1, activated SMAD2 and activated SMAD3; binding with SMAD4 is not detected (By similarity). Interacts with CBX4 and CTBP1.

**Subcellular Location:**

Nucleus.

**Post-translational modifications:**

Sumoylation on Lys-391 and Lys-866 is promoted by the E3 SUMO-protein ligase CBX4, and impairs interaction with CTBP1 and transcription repression activity.

**DISEASE:**

Defects in ZEB2 are the cause of Mowat-Wilson syndrome (MWS) [MIM:235730]; also known as Hirschsprung disease-mental retardation syndrome. A complex developmental disorder characterized by mental retardation, delayed motor development, epilepsy, microcephaly and a wide spectrum of clinically heterogeneous features suggestive of neurocristopathies at the cephalic, cardiac, and vagal levels. Some patients manifest Hirschsprung disease. Affected patients show an easily recognizable facial appearance with deep set eyes and hypertelorism, medially divergent, broad eyebrows, prominent columella, pointed chin and uplifted, notched ear lobes.

**Similarity:**

Belongs to the delta-EF1/ZFH-1 C2H2-type zinc-finger family.  
Contains 7 C2H2-type zinc fingers.  
Contains 1 homeobox DNA-binding domain.

**SWISS:**

O60315

**Gene ID:**

9839

**Database links:**

[Entrez Gene: 9839](#)Human

[Entrez Gene: 24136](#)Mouse

[Entrez Gene: 311071](#)Rat

[Omim: 605802](#)Human

[SwissProt: O60315](#)Human

[SwissProt: Q9R0G7](#)Mouse

[Unigene: 34871](#)Human

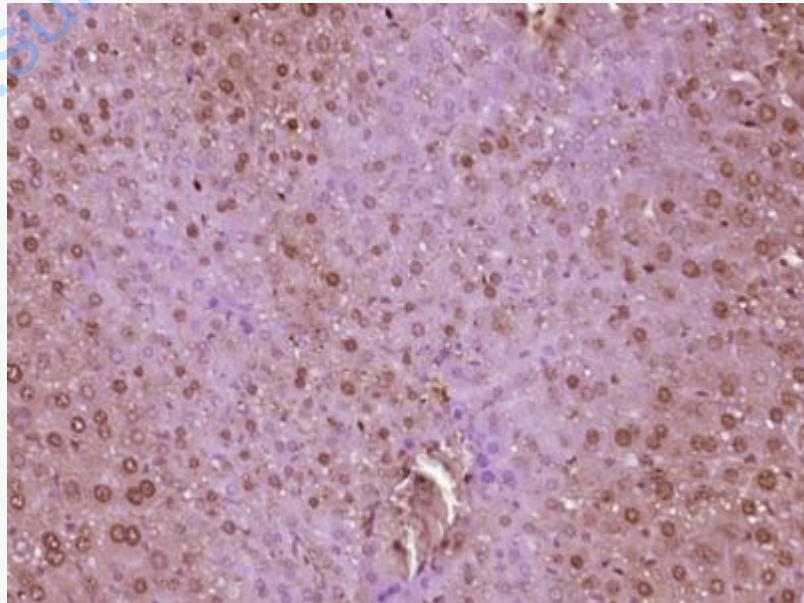
[Unigene: 440702](#)Mouse

[Unigene: 59710](#)Rat

**Important Note:**

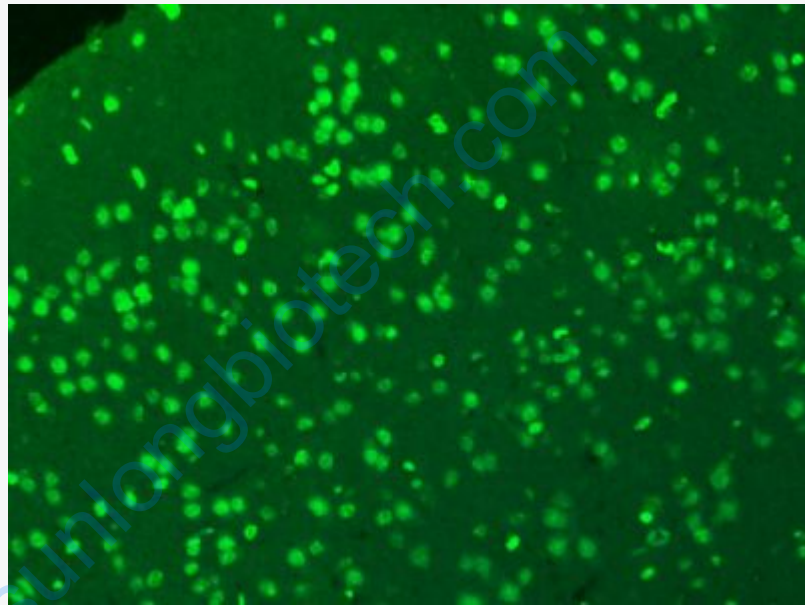
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**Picture:**

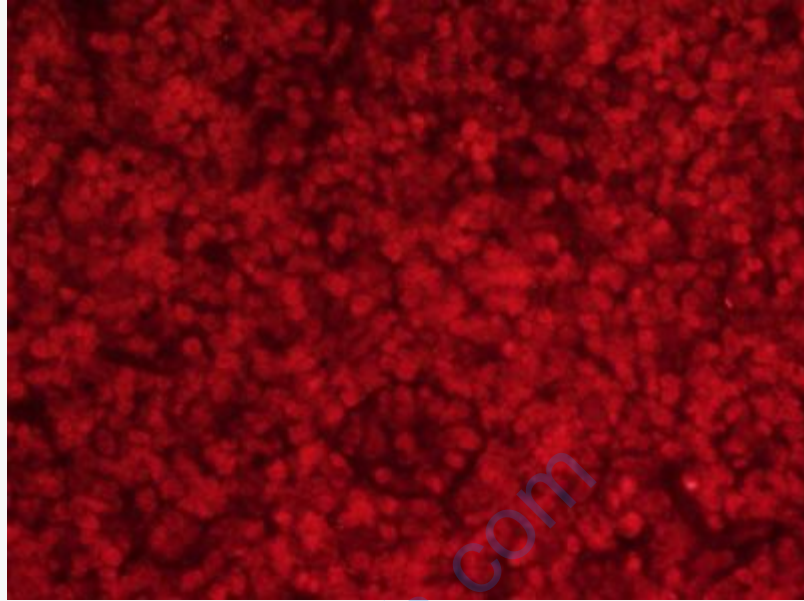


Paraformaldehyde-fixed, paraffin embedded (Mouse liver); Antigen retrieval by

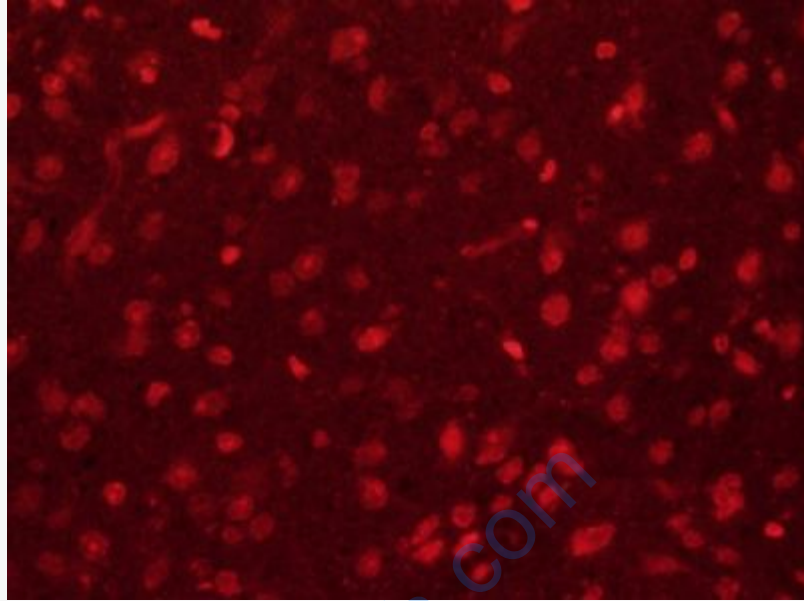
boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (SIP1) Polyclonal Antibody, Unconjugated (SL9186R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (SIP1) Polyclonal Antibody, Unconjugated (SL9186R) at 1:400 overnight at 4°C, followed by a conjugated Goat Anti-Rabbit IgG antibody (SL9186R) for 90 minutes, and DAPI for nuclei staining.



Paraformaldehyde-fixed, paraffin embedded (Mouse lymph node); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (SIP1) Polyclonal Antibody, Unconjugated (SL9186R) at 1:400 overnight at 4°C, followed by a conjugated Goat Anti-Rabbit IgG antibody (SL9186R) for 90 minutes, and DAPI for nuclei staining.



Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (SIP1) Polyclonal Antibody, Unconjugated (SL9186R) at 1:400 overnight at 4°C, followed by a conjugated Goat Anti-Rabbit IgG antibody (SL9186R) for 90 minutes, and DAPI for nuclei staining.