



Rabbit Anti-HOXA13 antibody

SL12244R

Product Name:	HOXA13
Chinese Name:	同源异型盒基因HOXA13抗体
Alias:	Homeo box 1J; Homeo box A13; Homeobox 1J; Homeobox A13; Homeobox protein Hox A13; Homeobox protein Hox-1J; Homeobox protein Hox-A13; Homeobox protein HOXA13; Homeobox1J; HomeoboxA13; HOX 1; HOX 1J; Hox 1J protein; HOX A13; HOX1; HOX1J; HOXA 13; HOXA13; HXA13_HUMAN; Transcription factor HOXA13.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Pig,Cow,Horse,Rabbit,Sheep,
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:	40kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from Human HOXA13:332-388/388
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 Hox proteins play a role in development and cellular differentiation by regulating downstream target genes. Specifically, the Hox proteins direct DNA-protein and protein-protein interactions that assist in determining the morphologic features associated with

the anterior-posterior body axis. HoxA13 and HoxD13 also bind to other BMP and TGF-beta/Activin-regulated Smad proteins including Smad1 and Smad2, but not Smad4. In humans and mice, loss of HOXA13 function causes defects in the growth and patterning of the digits and interdigital tissues. Analysis of HoxA13 expression reveals a pattern of localization overlapping with sites of reduced Bmp2 and Bmp7 expression in HoxA13 mutant limbs. HoxA13 regulates Bmp2 and Bmp7 expression, providing a link between HoxA13, its target genes and the specific developmental processes affected by loss of HoxA13 function.

Function:

Sequence-specific transcription factor which is part of a developmental regulatory system that provides cells with specific positional identities on the anterior-posterior axis.

Subcellular Location:

Nucleus.

DISEASE:

Defects in HOXA13 are the cause of hand-foot-genital syndrome (HFGS) [MIM:140000]; also known as hand-foot-uterus syndrome. The clinical features include small feet with unusually short great toes and abnormal thumbs. Females with the disorder have duplication of the genital tract. Defects in HOXA13 are the cause of Guttmacher syndrome (GUTTS) [MIM:176305]. Guttmacher syndrome is a dominantly inherited combination of distal limb and genital tract abnormalities. It has several features in common with hand-foot-genital syndrome, including hypoplastic first digits and hypospadias. Typical features not seen in hand-foot-genital syndrome include postaxial polydactyly of the hands and uniphalangial second toes with absent nails.

Similarity:

Belongs to the Abd-B homeobox family.
Contains 1 homeobox DNA-binding domain.

SWISS:

P31271

Gene ID:

3209

Database links:

[Entrez Gene: 3209](#)Human

[Entrez Gene: 15398](#)Mouse

[Entrez Gene: 500129](#)Rat

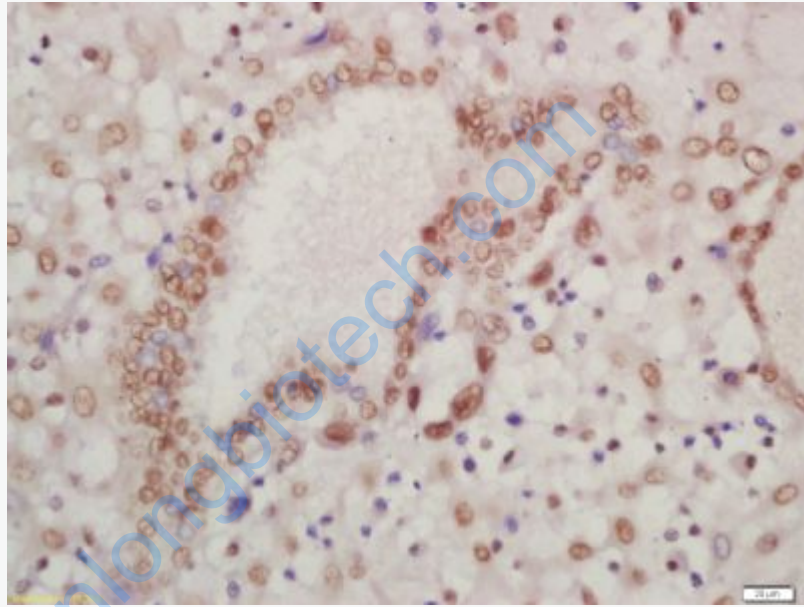
[Omim: 142959](#)Human

[SwissProt: P31271](#)Human

[SwissProt: Q62424](#)Mouse

Important Note:

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



Picture:

Tissue/cell: human placenta 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°C for 20 min;

Incubation: Anti-HOXA13 Polyclonal Antibody, Unconjugated(SL12244R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining