10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

HOXA13 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP54792

Product Information

Application	WB, IHC-P, IHC-F, IF, ICC, E
Primary Accession	P31271
Reactivity	Rat, Pig, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	39727
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from Human HOXA13
Epitope Specificity	332-388/388
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Nucleus.
SIMILARITY	Belongs to the Abd-B homeobox family. Contains 1 homeobox DNA-binding domain.
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 uniphalangeal second toes with absent nails.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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.

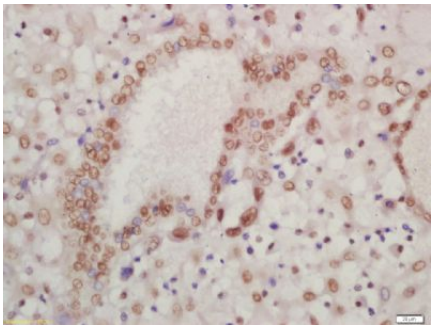
Additional Information

Gene ID	3209
Other Names	Homeobox protein Hox-A13, Homeobox protein Hox-1J, HOXA13, HOX1J
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

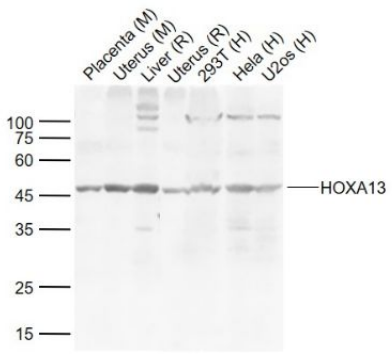
Protein Information

Name	HOXA13
Synonyms	HOX1J
Function	Sequence-specific, AT-rich binding transcription factor which is part of a developmental regulatory system that provides cells with specific positional identities on the anterior-posterior axis.
Cellular Location	Nucleus.

Images



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℃ for 20 min;
Incubation: Anti-HOXA13 Polyclonal Antibody, Unconjugated(AP54792) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Sample:
Lane 1: Placenta (Mouse) Lysate at 40 ug
Lane 2: Uterus (Mouse) Lysate at 40 ug
Lane 3: Liver (Rat) Lysate at 40 ug
Lane 4: Uterus (Rat) Lysate at 40 ug
Lane 5: 293T (Human) Cell Lysate at 30 ug
Lane 6: Hela (Human) Cell Lysate at 30 ug
Lane 7: U2os (Human) Cell Lysate at 30 ug
Primary: Anti-HOXA13 (AP54792) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 40 kD
Observed band size: 46 kD

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.