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

IDN3 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP56032

Specification

IDN3 Polyclonal Antibody - Product Information

Application	**IHC-P, IHC-F, IF, ICC**
Primary Accession	Q6KC79
Reactivity	**Rat, Pig, Dog, Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**316 KDa**
Physical State	**Liquid**
Immunogen	**KLH conjugated synthetic peptide derived from human IDN3**
Epitope Specificity	**2651-2805/2805**
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 SCC2/Nipped-B family. Contains 5 HEAT repeats.**
SUBUNIT	**Interacts directly with CBX5 via the PxVxL motif.**
DISEASE	**Cornelia de Lange syndrome 1 (CDLS1) [MIM:122470]: A form of Cornelia de Lange syndrome, a clinically heterogeneous developmental disorder associated with malformations affecting multiple systems. Characterized by facial dysmorphisms, abnormal hands and feet, growth delay, cognitive retardation, hirsutism, gastroesophageal dysfunction and cardiac, ophthalmologic and genitourinary anomalies. Note=The disease is caused by mutations affecting the gene represented in this entry.**
Important Note	**This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.**

Background Descriptions
This gene encodes the homolog of the Drosophila melanogaster Nipped-B gene product and fungal Scc2-type sister chromatid cohesion proteins. The Drosophila protein facilitates enhancer-promoter communication of remote enhancers and plays a role in developmental regulation. It is also homologous to a family of chromosomal adherins with broad roles in sister chromatid cohesion, chromosome condensation, and DNA repair. The human protein has a bipartite nuclear targeting sequence and a putative HEAT repeat. Condensins, cohesins and other complexes with chromosome-related functions also contain HEAT repeats. Mutations in this gene

result in Cornelia de Lange syndrome, a disorder characterized by dysmorphic facial features, growth delay, limb reduction defects, and mental retardation. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008].

IDN3 Polyclonal Antibody - Additional Information

Gene ID 25836

Other Names
Nipped-B-like protein, Delangin, SCC2 homolog, NIPBL, IDN3, SCC2 {ECO:0000303|PubMed:22628566}

Target/Specificity
Widely expressed. Highly expressed in heart, skeletal muscle, fetal and adult liver, fetal and adult kidney. Expressed at intermediates level in thymus, placenta, peripheral leukocyte and small intestine. Weakly or not expressed in brain, colon, spleen and lung.

Dilution
IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>ICC~~N/A

Format
0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage
Store at -20 ℃ 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 ℃.

IDN3 Polyclonal Antibody - Protein Information

Name NIPBL

Synonyms IDN3, SCC2 {ECO:0000303|PubMed:22628566}

Function
Plays an important role in the loading of the cohesin complex on to DNA. Forms a heterodimeric complex (also known as cohesin loading complex) with MAU2/SCC4 which mediates the loading of the cohesin complex onto chromatin (PubMed:22628566, PubMed:28914604). Plays a role in cohesin loading at sites of DNA damage. Its recruitment to double- strand breaks (DSBs) sites occurs in a CBX3-, RNF8- and RNF168- dependent manner whereas its recruitment to UV irradiation-induced DNA damage sites occurs in a ATM-, ATR-, RNF8- and RNF168-dependent manner (PubMed:28167679). Along with ZNF609, promotes cortical neuron migration during brain development by regulating the transcription of crucial genes in this process. Preferentially binds promoters containing paused RNA polymerase II. Up-regulates the expression of SEMA3A, NRP1, PLXND1 and GABBR2 genes, among others (By similarity).

Cellular Location
Nucleus. Chromosome {ECO:0000250|UniProtKB:Q6KCD5}

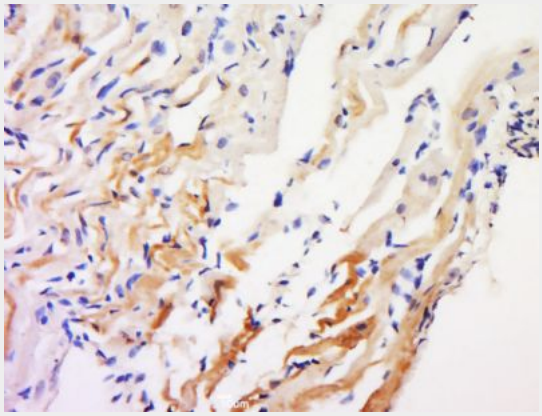
Tissue Location
Widely expressed. Highly expressed in heart, skeletal muscle, fetal and adult liver, fetal and adult kidney Expressed at intermediates level in thymus, placenta, peripheral leukocyte and small intestine. Weakly or not expressed in brain, colon, spleen and lung.

IDN3 Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

IDN3 Polyclonal Antibody - Images



Tissue/cell: Rat heart 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-IDN3 Polyclonal Antibody, Unconjugated(bs-15541R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining