

Anti-IDN3 (GOAT) Antibody
IDN3 Antibody
Catalog # ASR5087**Specification****Anti-IDN3 (GOAT) Antibody - Product Information**

Host	Goat
Conjugate	Unconjugated
Target Species	Human
Reactivity	Human, Mouse
Clonality	Polyclonal
Application	WB, E, I, LCI
Application Note	This affinity purified antibody has been tested for use in ELISA and western blot. Specific conditions for reactivity should be optimized by the end user. Expect bands at 316 kDa in size corresponding to IDN3 by western blotting in the appropriate cell lysate or extract. Splice variants for this protein may show molecular weights of 304 kDa and 122 kDa.
Physical State	Liquid (sterile filtered)
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	This affinity-purified antibody was prepared from whole goat serum produced by repeated immunizations with a synthetic peptide corresponding to an internal region near amino acids 330-365 of Human IDN3.
Preservative	0.01% (w/v) Sodium Azide

Anti-IDN3 (GOAT) Antibody - Additional Information**Gene ID** 25836**Other Names**
25836**Purity**

This affinity purified antibody is directed against human IDN3 protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest reactivity with this protein from human, rat, mouse, dog, bovine and orangutan based on 100% homology for the immunogen sequence. Expect reactivity with multiple splice variants of this protein. Cross reactivity with IDN3 homologues from other sources has not been determined.

Storage Condition

Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted

liquid. Dilute only prior to immediate use.

Precautions Note

This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-IDN3 (GOAT) 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

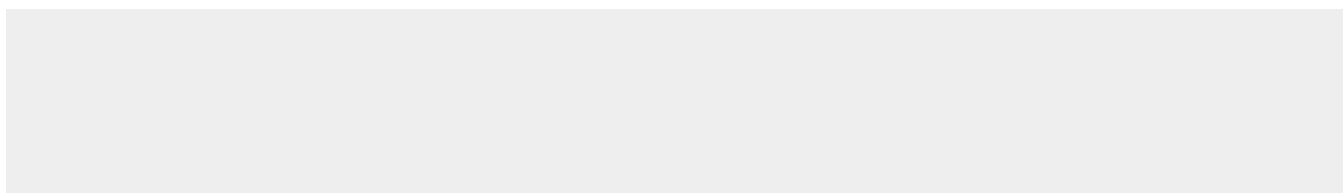
Widely expressed. Highly expressed in heart, skeletal muscle, fetal and adult liver, fetal and adult kidney Expressed at intermediates level in thymus, placenta, peripheral leukocyte and small intestine. Weakly or not expressed in brain, colon, spleen and lung.

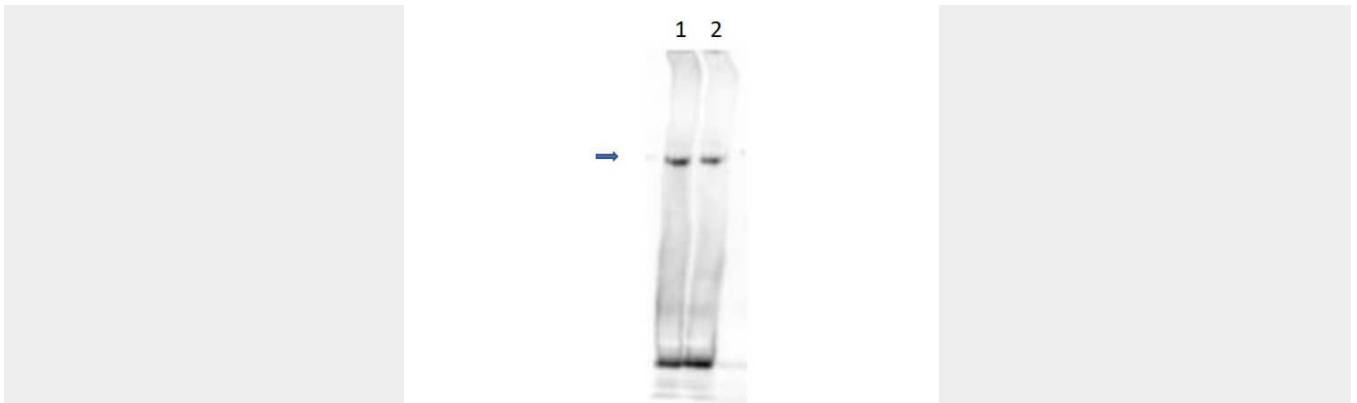
Anti-IDN3 (GOAT) Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-IDN3 (GOAT) Antibody - Images





Western blot using Rockland's Affinity Purified anti-IDN3 antibody shows detection of a band ~300 kDa corresponding to IDN3 (arrowhead) in human kidney (lane 1) and human heart (lane 2) whole cell tissue extracts. Approximately 20 µg of each lysate was separated by SDS-PAGE and transferred onto nitrocellulose. After blocking the membrane was probed with the primary antibody diluted to 1:500. Use HRP conjugated Rb-a-Goat IgG [H&L] MXHu (605-403-013) for detection.

Anti-IDN3 (GOAT) Antibody - Background

IDN3 (also known as Colon tumor susceptibility 2, DKFZp434L1319, FLJ13648, Mis 4, Scc-2, Delangin and Sister chromatid cohesion protein) is the mammalian homologue of Scc2 in *S. cerevisiae* and Mis4 in *S. pombe*. In yeast, this factor was originally identified genetically as being involved in sister chromatid cohesion; subsequent work has determined that it is not involved in cohesion directly but is required for the loading of cohesions onto chromatin during S phase. It shares 37% sequence identity with Nipped-B gene product of *Drosophila*, which facilitates enhancer-promoter communication of remote enhancers. The *Drosophila* protein is also homologous to a family of chromosomal adherins with broad roles in sister chromatid cohesion, chromosome condensation, and DNA repair. IDN3 is a nuclear protein that is widely expressed and found at the highest levels in heart, skeletal muscle, fetal and adult liver, and fetal and adult kidney. The protein is also found, albeit at lower levels of expression in thymus, placenta, peripheral leukocyte and small intestine. Multiple isoforms of the protein have been reported.