

## **FOXN1 Antibody (Center)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP12053C

## **Specification**

## FOXN1 Antibody (Center) - Product Information

Application WB, FC,E Primary Accession O15353

Other Accession <u>Q61575</u>, <u>NP 003584.2</u>

Reactivity
Predicted
Host
Clonality
Isotype
Calculated MW
Antigen Region

Human
Mouse
Rabbit
Polyclonal
Rabbit IgG
68925
350-378

# FOXN1 Antibody (Center) - Additional Information

### **Gene ID 8456**

### **Other Names**

Forkhead box protein N1, Winged-helix transcription factor nude, FOXN1, RONU, WHN

### Target/Specificity

This FOXN1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 350-378 amino acids from the Central region of human FOXN1.

## **Dilution**

WB~~1:2000 FC~~1:10~50

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

### **Precautions**

FOXN1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

# FOXN1 Antibody (Center) - Protein Information

### Name FOXN1



## Synonyms RONU, WHN

**Function** Transcriptional regulator which regulates the development, differentiation, and function of thymic epithelial cells (TECs) both in the prenatal and postnatal thymus. Acts as a master regulator of the TECs lineage development and is required from the onset of differentiation in progenitor TECs in the developing fetus to the final differentiation steps through which TECs mature to acquire their full functionality. Regulates, either directly or indirectly the expression of a variety of genes that mediate diverse aspects of thymus development and function, including MHC Class II, DLL4, CCL25, CTSL, CD40 and PAX1. Regulates the differentiation of the immature TECs into functional cortical TECs (cTECs) and medullary TECs (mTECs). Essential for maintenance of mTECs population in the postnatal thymus. Involved in the morphogenesis and maintenance of the three-dimensional thymic microstructure which is necessary for a fully functional thymus. Plays an important role in the maintenance of hematopoiesis and particularly T lineage progenitors within the bone marrow niche with age. Essential for the vascularization of the thymus anlage. Promotes the terminal differentiation of epithelial cells in the epidermis and hair follicles, partly by negatively regulating the activity of protein kinase C (By similarity). Plays a crucial role in the early prenatal stages of T-cell ontogeny (PubMed: 21507891).

**Cellular Location** Nucleus.

**Tissue Location** Expressed in thymus.

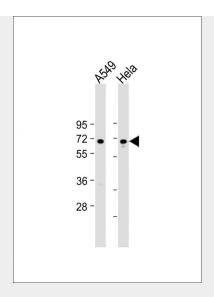
## FOXN1 Antibody (Center) - Protocols

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

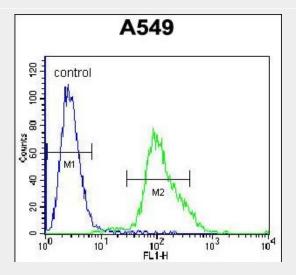
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## FOXN1 Antibody (Center) - Images





All lanes: Anti-FOXN1 Antibody (Center) at 1:2000 dilution Lane 1: A549 whole cell lysate Lane 2: Hela whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 69 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



FOXN1 Antibody (Center) (Cat. #AP12053c) flow cytometric analysis of A549 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

## FOXN1 Antibody (Center) - Background

Mutations in the winged-helix transcription factor gene at the nude locus in mice and rats produce the pleiotropic phenotype of hairlessness and athymia, resulting in a severely compromised immune system. This gene is orthologous to the mouse and rat genes and encodes a similar DNA-binding transcription factor that is thought to regulate keratin gene expression. A mutation in this gene has been correlated with T-cell immunodeficiency, the skin disorder congenital alopecia, and nail dystrophy. Alternative splicing in the 5' UTR of this gene has been observed. [provided by RefSeq].

## FOXN1 Antibody (Center) - References





Jugessur, A., et al. PLoS ONE 5 (7), E11493 (2010):
Mandinova, A., et al. J. Clin. Invest. 119(10):3127-3137(2009)
Pignata, C., et al. Adv. Exp. Med. Biol. 665, 195-206 (2009):
Weiner, L., et al. Cell 130(5):932-942(2007)
Nonaka, D., et al. Am. J. Surg. Pathol. 31(7):1038-1044(2007)