

FOXN1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP12053C

Product Information

Application	WB, FC, E
Primary Accession	O15353
Other Accession	Q61575 , NP_003584.2
Reactivity	Human, Mouse
Predicted	Mouse, Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB32003
Calculated MW	68925
Antigen Region	350-378

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~~1:1000 FC~~1:10~50 E~~Use at an assay dependent concentration.
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.

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.

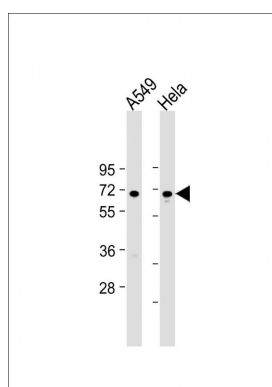
Background

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].

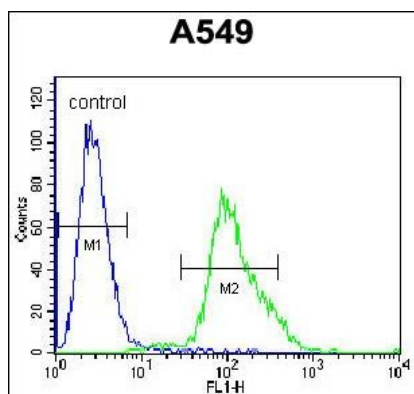
References

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)

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.

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