

# **GRHL3** Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP16526b

### **Product Information**

**Application** WB, E **Primary Accession Q8TE85 Other Accession** NP 937817.2 Reactivity Human Host Rabbit Clonality Polyclonal Isotype Rabbit IgG **Clone Names** RB36033 **Calculated MW** 70345 1-30 **Antigen Region** 

## **Additional Information**

**Gene ID** 57822

Other Names Grainyhead-like protein 3 homolog, Sister of mammalian grainyhead,

Transcription factor CP2-like 4, GRHL3, SOM, TFCP2L4

**Target/Specificity**This GRHL3 antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 1-30 amino acids from the N-terminal

region of human GRHL3.

**Dilution** WB~~1:1000 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** GRHL3 Antibody (N-term) is for research use only and not for use in

diagnostic or therapeutic procedures.

#### **Protein Information**

Name GRHL3 ( HGNC:25839)

**Function** Transcription factor playing important roles in primary neurulation and in

the differentiation of stratified epithelia of both ectodermal and endodermal

origin (By similarity). Binds directly to the consensus DNA sequence

5'-AACCGGTT-3' acting as an activator and repressor on distinct target genes (PubMed:21081122, PubMed:25347468). xhibits functional redundancy with GRHL2 in epidermal morphogenetic events and epidermal wound repair (By similarity). Exhibits functional redundancy with GRHL2 in epidermal morphogenetic events and epidermal wound repair but is essential to form the epidermal barrier with TGM3 as critical direct target gene among others. Despite being dispensable during normal epidermal homeostasis in the adulthood, is again required for barrier repair after immune-mediated epidermal damage, regulates distinct gene batteries in embryonic epidermal differentiation and adult epidermal barrier reformation after injury. Plays unique and cooperative roles with GRHL2 in establishing distinct zones of primary neurulation. Essential for spinal closure, functions cooperatively with GRHL2 in closure 2 (forebrain/midbrain boundary) and posterior neuropore closure (By similarity). Also required for proper development of the oral periderm (PubMed:24360809). No genetic interaction with GRHL3, no functional cooperativity due to diverse target gene selectivity (PubMed:21081122).

**Cellular Location** 

Nucleus.

**Tissue Location** 

Expressed in brain, colon, pancreas, placenta and kidney. Isoform 1 is expressed in lung and tonsil. Isoform 2 is prostate-specific.

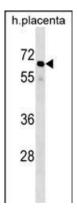
## **Background**

This gene encodes a member of the grainyhead family of transcription factors. The encoded protein may function as a transcription factor during development, and has been shown to stimulate migration of endothelial cells. Multiple transcript variants encoding distinct isoforms have been identified for this gene.

#### References

Guardiola-Serrano, F., et al. Biochem. Biophys. Res. Commun. 376(4):748-752(2008) Ting, S.B., et al. Biochem. J. 370 (PT 3), 953-962 (2003) :

# **Images**



GRHL3 Antibody (N-term) (Cat. #AP16526b) western blot analysis in human placenta tissue lysates (35ug/lane). This demonstrates the GRHL3 antibody detected the GRHL3 protein (arrow).

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