



GRHL2 (PT1753R) mouse mAb

Catalog No	YP-mAb-19430
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB
Gene Name	GRHL2
Immunogen	The specific immunogen used to produce this antibody is proprietary information.
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal,Mouse,IgG
Purification	Recombinant Antibody expressed in animal component-free (ACF) media, purified via Protein A affinity chromatography.
Dilution	WB 1:2000-1:10000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-15°C to -25°C/1 year(Do not lower than -25°C)
Synonyms	GRHL2;Grainyhead-like protein 2 homolog;Brother of mammalian grainyhead ; Transcription factor CP2-like 3 ; BOM ; TFCEP2L3 ;
Observed Band	71kD
Calculated Molecular Weight	71kD
Cell Pathway	Nucleus Membrane detected at cell-cell contact areas
Tissue Specificity	Expressed in keratinocytes (at protein level) . Highly expressed in placenta , prostate , brain and kidney. Lower-level expression in a variety of epithelial tissues such as thymus , lung , salivary gland , mammary gland and digestive tract. Expressed in the cochlear. Expressed in corneal epithelial cells , but not in the endothelium or stroma (PubMed:29499165) .
Function	Transcription factor playing an important role in primary neurulation and in epithelial development (PubMed:25152456 , PubMed:29309642) . Binds directly to the consensus DNA sequence 5'-AACCGGTT-3' acting as an activator and repressor on distinct target genes (By similarity) . During embryogenesis , plays unique and cooperative roles with GRHL3 in establishing distinct zones of primary neurulation. Essential for closure 3 (rostral end of the forebrain) , functions cooperatively with GRHL3 in closure 2 (forebrain/midbrain boundary) and posterior neuropore closure (By similarity) . Regulates epithelial



morphogenesis acting as a target gene-associated transcriptional activator of apical junctional complex components. Up-regulates of CLDN3 and CLDN4 , as well as of RAB25 , which increases the CLDN4 protein and its localization at tight junctions (By similarity) . Comprises an essential component of the transcriptional machinery that establishes appropriate expression levels of CLDN4 and CDH1 in different types of epithelia. Exhibits functional redundancy with GRHL3 in epidermal morphogenetic events and epidermal wound repair (By similarity) . In lung , forms a regulatory loop with NKX2-1 that coordinates lung epithelial cell morphogenesis and differentiation (By similarity) . In keratinocytes , plays a role in telomerase activation during cellular proliferation , regulates TERT expression by binding to TERT promoter region and inhibiting DNA methylation at the 5'-CpG island , possibly by interfering with DNMT1 enzyme activity (PubMed:19015635 , PubMed:20938050) . In addition , impairs keratinocyte differentiation and epidermal function by inhibiting the expression of genes clustered at the epidermal differentiation complex (EDC) as well as GRHL1 and GRHL3 through epigenetic mechanisms (PubMed:23254293) .By similarity6 publications1 publication

Background

The protein encoded by this gene is a transcription factor that can act as a homodimer or as a heterodimer with either GRHL1 or GRHL3. Defects in this gene are a cause of non-syndromic sensorineural deafness autosomal dominant type 28 (DFNA28) .[provided by RefSeq , Mar 2009]

matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images

Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-GRHL2 (PT1753R) antibody. The HRP-conjugated Goat anti-Mouse IgG (H + L) antibody was used to detect the antibody.

Lane 1: MCF7

Lane 2: HaCaT

Lane 3: HaCaT

Lane 4: Rat skin

Predicted band size: 71kDa

Observed band size: 71kDa