

# HIRA Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17007A

#### **Product Information**

Application WB, E Primary Accession P54198

Other Accession <u>Q61666</u>, <u>NP 003316.3</u>

Reactivity Human **Predicted** Mouse Host Rabbit Clonality Polyclonal Isotype Rabbit IgG **Clone Names** RB36757 111835 **Calculated MW Antigen Region** 32-61

#### **Additional Information**

**Gene ID** 7290

Other Names Protein HIRA, TUP1-like enhancer of split protein 1, HIRA, DGCR1, HIR, TUPLE1

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

conjugated synthetic peptide between 32-61 amino acids from the N-terminal

region of human HIRA.

**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** HIRA Antibody (N-term) is for research use only and not for use in diagnostic

or therapeutic procedures.

#### **Protein Information**

Name HIRA

Synonyms DGCR1, HIR, TUPLE1

**Function** Cooperates with ASF1A to promote replication-independent chromatin

assembly. Required for the periodic repression of histone gene transcription during the cell cycle. Required for the formation of senescence-associated heterochromatin foci (SAHF) and efficient senescence-associated cell cycle exit.

Cellular Location Nucleus. Nucleus, PML body. Note=Primarily, though not exclusively, localized

to the nucleus. Localizes to PML bodies immediately prior to onset of

senescence

**Tissue Location** Expressed at high levels in kidney, pancreas and skeletal muscle and at lower

levels in brain, heart, liver, lung, and placenta.

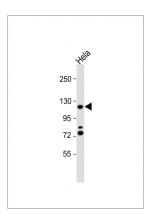
## **Background**

This gene encodes a histone chaperone that preferentially places the variant histone H3.3 in nucleosomes. Orthologs of this gene in yeast, flies, and plants are necessary for the formation of transcriptionally silent heterochomatin. This gene plays an important role in the formation of the senescence-associated heterochromatin foci. These foci likely mediate the irreversible cell cycle changes that occur in senescent cells. It is considered the primary candidate gene in some haploinsufficiency syndromes such as DiGeorge syndrome, and insufficient production of the gene may disrupt normal embryonic development.

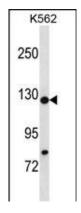
### References

Bailey, S.D., et al. Diabetes Care (2010) In press: Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009) Banumathy, G., et al. Mol. Cell. Biol. 29(3):758-770(2009) Ramelli, G.P., et al. Dev Med Child Neurol 50(12):953-955(2008) Zhang, R., et al. Mol. Cell. Biol. 27(6):2343-2358(2007)

## **Images**



Anti-HIRA Antibody (N-term) at 1:1000 dilution + 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: 112 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



HIRA Antibody (N-term) (Cat. #AP17007a) western blot analysis in K562 cell line lysates (35ug/lane). This demonstrates the HIRA antibody detected the HIRA protein (arrow).

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