10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

HIRA Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6277c

Product Information

Application	WB, E
Primary Accession	P54198
Other Accession	Q8QFR2, Q61666, P79987
Reactivity	Human, Mouse
Predicted	Chicken, Mouse, Xenopus
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	111835
Antigen Region	431-461

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 431-461 amino acids from the Central 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 prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
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 (Center) 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.

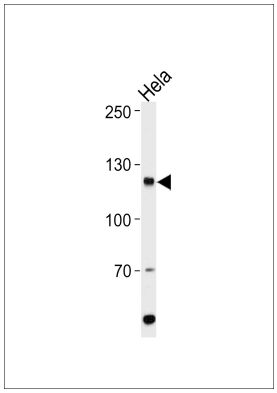
Background

HIRA is a histone chaperone that preferentially places the variant histone H3.3 in nucleosomes. Orthologs of this protein in yeast, flies, and plants are necessary for the formation of transcriptionally silent heterochomatin. It 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 protein in some haploinsufficiency syndromes such as DiGeorge syndrome, and insufficient production of the gene may disrupt normal embryonic development.

References

Zhang,R., Mol. Cell. Biol. 27 (6), 2343-2358 (2007)
Tang,Y., Nat. Struct. Mol. Biol. 13 (10), 921-929 (2006)

Images



HIRA Antibody (Center) (Cat. #AP6277c) western blot analysis in Hela cell line lysates (35ug/lane).This demonstrates the HIRA antibody detected the HIRA protein (arrow).