diagenode
A Hologic Company

TECHNICAL DATASHEET

PRODUCT NAME Hira polyclonal antibody		
Other names: HIR, DGCR1, TUP1, TUPLE1		
Cat. No. C15310097 (CS-097-100)	**Type:** Polyclonal	**Size:** 100 µl
Lot #: A367-004	**Source:** Rabbit	**Concentration:** not determined

Description: Polyclonal antibody raised in rabbit against mouse Hira (histone cell cycle regulation defective homolog A), using a KLH-conjugated synthetic peptide containing an amino acid sequence from the central part of the protein (1).

Specificity: Mouse: positive
Other species: not tested

Applications	Suggested dilution	References
ELISA	1:500 – 1:200	Fig 1
Western blotting	1:1,000	Fig 2, (1)

Purity: Whole antiserum from rabbit containing 0.05% azide.

Storage: Store at -20°C; for long storage, store at -80°C. Avoid multiple freeze-thaw cycles.

Precautions: This product is for research use only. Not for use in diagnostic or therapeutic procedures.

References:

(1) Peptide design by Andrea Kranz, Western blot analysis by Heike Petzold and Andrea Kranz BIOTEC, Dept. of Genomics, Prof. F. Stewart, TU Dresden, Tatzberg 47/49, 01307 Dresden, Germany

Last data sheet update: April 7, 2010

Target description

Hira (UniProtKB/Swiss-Prot entry P54198) is a histone chaperone that cooperates with ASF1A to promote replication-independent chromatin assembly. It is important for histone regulation and is required for the periodic repression of histone gene transcription during the cell cycle. Hira plays an important role in the formation of transcriptionally silent senescence-associated heterochromatic foci (SAHF). SAHF, which contain heterochromatin proteins such as HP1, are believed to repress expression of proliferation-promoting genes, leading to the irreversible cell cycle changes that occur in senescent cells. Interaction between HIRA and ASF1A is the rate limiting step in the formation of SAHF. Hira is also thought to be involved in certain haploinsufficiency syndromes such as DiGeorge syndrome. Insufficient production of Hira protein may disrupt normal embryonic development.

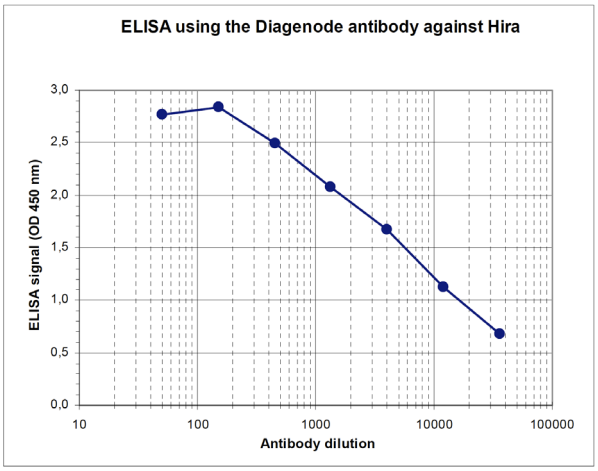

Figure 1
Determination of the titer
To determine the titer, an ELISA was performed using a serial dilution of the Diagenode antibody directed against mouse Hira (Cat. No. CS-097-100). The wells were coated with the peptide used for immunisation of the rabbit. By plotting the absorbance against the antibody dilution (Figure 1), the titer of the antibody was estimated to be 1:6,300.

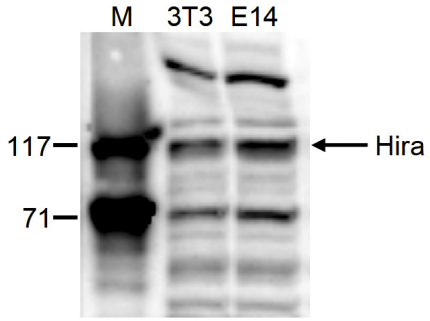

Figure 2
Western blot analysis using the Diagenode antibody directed against Hira (1)
Western blot was performed on whole cell lysates from mouse fibroblasts (NIH3T3) and embryonic stem cells (E14Tg2a) with the Diagenode antibody against mouse Hira (Cat. No. CS-097-100), diluted 1:1,000 in BSA/PBS-Tween. The molecular weight marker (M, in kDa) is shown on the left; the location of the protein of interest (112 kDa) is indicated on the right.