diagenode
A Hologic Company

TECHNICAL DATASHEET

PRODUCT NAME TIP5 polyclonal antibody		
Other names: BAZ2A, WALp3		
Cat. No. C15310090 (CS-090-100)	**Type:** Polyclonal **ChIP-grade**	**Size:** 100 µl
Lot #: A300-004	**Source:** Rabbit	**Concentration:** not determined

Product description: Polyclonal antibody raised in rabbit against TIP5 (Transcription termination factor I-interacting protein 5), using the recombinant protein.

Specificity: Human, mouse: positive
Other species: not tested

Applications	Suggested dilution	References
ChIP*	5 µl/ChIP	Fig 1
Western blotting	1:1,000	Fig 2

*Please note that of the optimal antibody amount per IP should be determined by the end-user. We recommend testing 1-10 µl per IP.

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 citing this antibody:

(1) Santoro R, Lienemann P and Fussenegger M (2009) Epigenetic engineering of ribosomal RNA genes enhances protein production. PLoS ONE 4: e6653

Last data sheet update: April 22, 2011

Target description

TIP 5 (UniProt/Swiss-Prot entry Q9UIF9) is the large subunit of the nucleolar remodeling complex NoRC. NoRC causes the repression of ribosomal gene transcription. It was demonstrated that histone deacetylation is involved in this repression and that TIP5 is associated with the histone deacetylase HDAC1 and mediates the deacetylation of histones in the vicinity of the rDNA promoter. The interaction of TIP5 and HDAC1, which is necessary for transcriptional repression, is established by the C-terminal PHD finger and bromodomain.

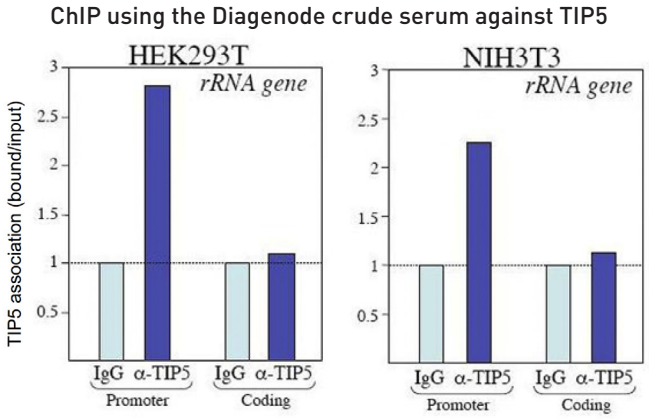

Figure 1

ChIP results obtained with the Diagenode antibody directed against TIP5

ChIP assays were performed using the Diagenode antibody against TIP5 (cat. No. CS-090-100). Chromatin from HEK293T and NIH3T3 cells was formaldehyde cross-linked and sheared with the Bioruptor (Diagenode) to yield fragments with an average length of 200 to 400 bp. ChIP was performed overnight at 4°C with 100 µg sheared chromatin and either 5 µl of the TIP5 antibody or 5 µl IgG which was used as negative IP control. The IP'd DNA was analysed by qPCR with primer sets for the promoter and the coding region of the 28s ribosomal RNA gene. Figure 1 shows the recovery by the TIP5 antibody and by IgG (set to 1), normalised to the input DNA. These results show that, both in HEK293T and in NIH3T3 cells, TIP5 is associated with the promoter, but not with the coding region of the 28srRNA gene.

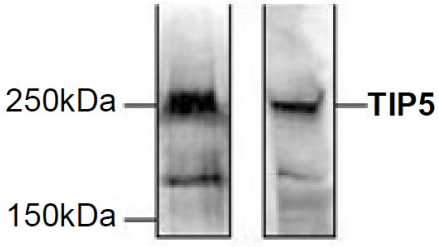

Figure 2

Western blot analysis using the Diagenode antibody directed against TIP5

Western blot was performed on 150 µg nuclear extract from either NIH3T3 or HeLa cells with the Diagenode antibody against TIP5 (cat. No. CS-090-100), diluted 1:1,000 in PBS containing 5% milk powder and 0.1% Tween-20. The molecular weight marker is shown on the left, the location of the protein of interest is indicated on the right.