



Technical Data Sheet

Diagenode sa
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Product name:

Crude serum directed against TIP5

(Transcription termination factor I-interacting protein 5)

Other names: BAZ2A, WALp3

| | | |
|---------------------------------|----------------------------------------------|-----------------------------------------|
| Catalog #: CS-090-100 | Type: Polyclonal ChIP-grade | Size: 100 µl |
| Lot #: A300-004 | Source: Rabbit | Concentration: Not determined |

Description: This antibody has been raised in rabbits against TIP5, using the recombinant protein.

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

| Applications | Suggested dilution/amount | References |
|---------------------|---------------------------|------------|
| ELISA | Not tested | |
| Dot blotting | Not tested | |
| Western blotting | 1:1,000 | Fig 1 |
| Gel Supershift | Not tested | |
| Immunofluorescence | Not tested | |
| Flow cytometry | Not tested | |
| Immunoprecipitation | Not tested | |
| ChIP | 5 µl/ChIP | Fig 2 |

Format: Crude serum from rabbit containing 0.05% w/v azide.

Storage: Store at -20°C/ -80°C. Avoid multiple freeze-thaw cycles.

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

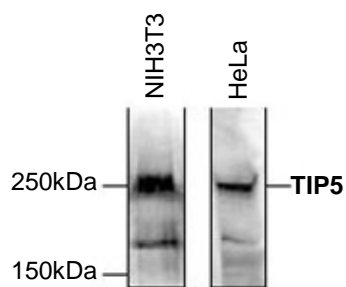
References:

[1] Zhou Y, Santoro R and Grummt I (2002) The chromatin remodeling complex NoRC targets HDAC1 to the ribosomal gene promoter and represses RNA polymerase I transcription. EMBO J 21:4632-4640

Availability date: June 09, 2008. Last data sheet update: June 04, 2008

Lot #: A300-004: rabbit #: A300/ bleed #: Final bleed

Figure 1

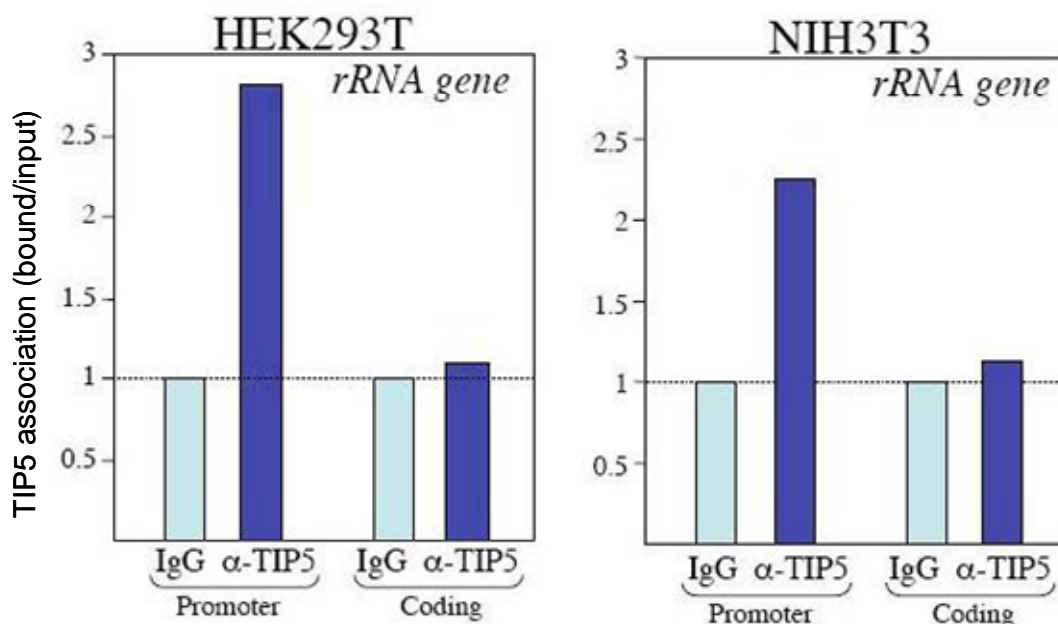


Western blot analysis using the Diagenode crude serum directed against TIP5.

Western blot was performed on 150 µg nuclear extract from either NIH3T3 or HeLa cells with the Diagenode crude serum directed against TIP5 (cat# 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.

Figure 2

ChIP using the Diagenode crude serum against TIP5



ChIP results obtained with the Diagenode crude serum directed against TIP5.

ChIP assays were performed using the crude serum directed against TIP5 (cat# 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 μ g sheared chromatin and either 5 μ l crude serum against TIP5 or 5 μ l 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 2 shows the recovery by the TIP5 crude serum 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.

Overview

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 [1]. The interaction of TIP5 and HDAC1, which is necessary for transcriptional repression, is established by the C-terminal PHD finger and bromodomain.