



Technical Data Sheet

Diagenode sa

CHU, Tour GIGA B34, 3^e étage
Avenue de l'Hôpital, 1
4000 Liège - Belgium

Product name:

antibody directed against hSpt16

(Human FACT complex subunit SPT16)

Other names: SUPT16H, FACT140, FACTp140

Catalog #: pAb-049-050	Type: Polyclonal	Size: 50 µg/ 25 µl
Lot #: 001	Source: Rabbit	Concentration: 2.0 µg/µl

Description: This antibody has been raised against amino-acids 276-572 of human Spt16 subcloned into a plasmid and expressed in *E.coli*.

Spt16 is a component of the FACT complex, a general chromatin factor that acts to reorganize nucleosomes (see overview below).

Specificity: Human: positive
Other species: not tested

Applications	Suggested dilution	References
ELISA	Not tested	
Dot blotting	Not tested	
Western blotting	1:1,000	Fig 1; [1]
Gel Supershift	Not tested	
Immunochemistry	Not tested	
Flow cytometry	Not tested	
Immunoprecipitation	Not tested	
ChIP	Not tested	

Format: In solution in PBS including 0.05% azide and 0.05% ProClin 300. The polyclonal antibody has been protein G purified.

Storage: For long 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.

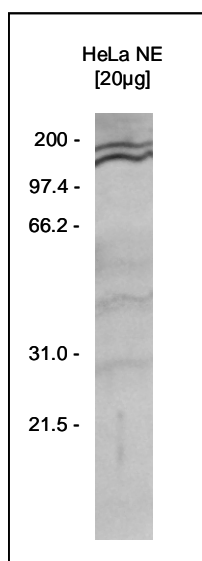
References:

[1]. Orphanides G., Wu W.H., Lane W.S., Hampsey M. and Reinberg D. 1999. *Nature* 400(6741):284-8.

Availability date: April 27, 2007. Last data sheet update: February 4, 2008

Lot #: 001/ bleed day: final bleed/ purification day: April 25, 2007

Figure 1



Western blot analysis using the Diagenode antibody anti-hSpt16.

HeLa nuclear extract (HeLa NE, 20 µg) was analysed by Western blot using the Diagenode antibody directed against hSpt16 (cat# pAb-049-050) at a dilution of 1:1,000 in TBS-Tween + 5% skimmed milk. On the left side a molecular weight marker is shown.

Overview

The FACT complex is involved in multiple processes that require DNA as a template such as mRNA elongation, DNA replication and DNA repair. During transcription elongation the FACT complex acts as a histone chaperone that both destabilizes and restores nucleosomal structure. Spt16 facilitates the passage of RNA polymerase II and transcription by promoting the dissociation of one histone H2A-H2B dimer from the nucleosome; then subsequently promotes the reestablishment of the nucleosome following the passage of RNA polymerase II. The FACT complex is probably also involved in phosphorylation of 'Ser-392' of p53/TP53 via its association with CK2 (casein kinase II).

Spt16 is a stable heterodimer of SSRP1 and SUPT16H. Spt16 is also a component of a CK2-SPT16-SSRP1 complex which forms following UV irradiation and is composed of SSRP1, Spt16/SUPT16H, CSNK2A1, CSNK2A2 and CSNK2B. Spt16 also interacts with NEK9, GTF2E2 and binds to histone H2A-H2B (UniProtKB/Swiss-Prot entry Q9Y5B9: <http://www.expasy.org/uniprot/Q9Y5B9>).