



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 hSSRP1

(**FACT complex subunit SSRP1; Structure-specific recognition protein 1**)

Other names: FACT80, FACTp80

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

Description: This antibody has been raised against the GST tagged N-terminus of human SSRP1.

SSRP1 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
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.

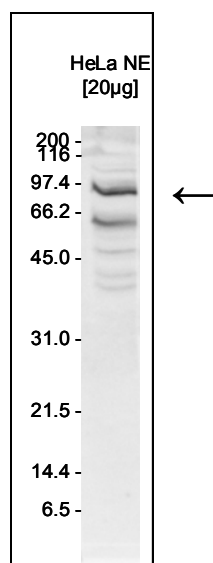
Storage: For long storage, store at -20°C/ -80°C. Avoid multiple freeze-thaw cycles.

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

Availability date: March 23, 2007. Last data sheet update: August 3, 2007

Lot #: 001: rabbit#1/ bleed day: final bleed/ purification day: March 21, 2007

Figure 1:



Western blot analysis using the Diagenode antibody anti-hSSRP1.

Western blot was performed using nuclear extracts from HeLa cells (HeLa NE, 20 µg) and the Diagenode purified antibody directed against hSSRP1 (cat# pAb-050-050) at dilution 1:1,000 in TBS-Tween + 5% skimmed milk. On the left side, a molecular weight marker is shown (in kDa). The arrow indicates the location of the protein of interest.

Overview

The FACT complex, a stable heterodimer of SSRP1 and SUPT16H (SPT16) and 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. It 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). SSRP1 binds specifically to double-stranded DNA and at low levels to DNA modified by the antitumor agent cisplatin. SSRP1 may potentiate cisplatin-induced cell death by blocking replication and repair of modified DNA. SSRP1 also acts as a transcriptional coactivator for p63/TP73L.

SSRP1 is also a component of a CK2-SPT16-SSRP1 complex which forms following UV irradiation and is composed of SSRP1, SUPT16H, CSNK2A1, CSNK2A2 and CSNK2B. SSRP1 binds to histone H3-H4 tetramers, but not to intact nucleosomes, interacts with isoform gamma of p63/TP73L, SRF and NEK9 (UniProtKB/Swiss-Prot entry Q08945: <http://www.expasy.org/uniprot/Q08945>).