

## SMYD3 polyclonal antibody - Classic

Cat. No. C15410253-100

|  |  |
|--|--|
| Type: Polyclonal   | Specificity: Human, mouse, rat: positive. Other species: not tested.                                     |
| Size: 100 µl   | Isotype: NA  |
| Concentration: 1.32 µg/µl  | Source: Rabbit   |
| Lot No.: 41906   | Purity: Affinity purified polyclonal antibody in PBS containing 20% glycerol and 0.025% ProClin 300.     |
| Storage buffer: NA   | Storage conditions: 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. |  |

Last Data Sheet Update: January 9, 2017

### Description

**Other names:** ZMYND1, ZNFN3A1, KMT3E, BA74P14.1

Polyclonal antibody raised in rabbit against SMYD3 (SET and MYND domain containing 3), using a recombinant protein.

### Applications

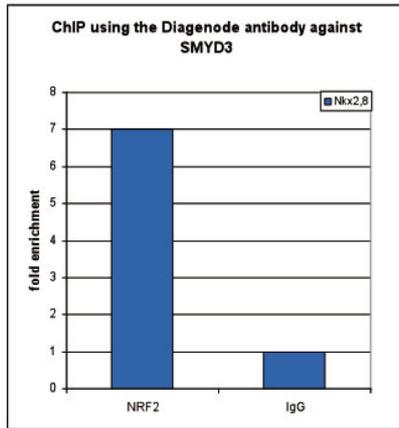
| Applications        | Suggested dilution * | References |
|---------------------|----------------------|------------|
| ChIP*               | 5 µg/ChIP            | Fig 1      |
| Western blotting    | 1:500 - 1:1,000      | Fig 2, 3   |
| Immunoprecipitation | 5 µg/IP              | Fig 4      |
| IF                  | 1:500                | Fig 5      |

\* Please note that the optimal antibody amount per IP should be determined by the end-user. We recommend testing 1-5 µg per IP.

### Target Description

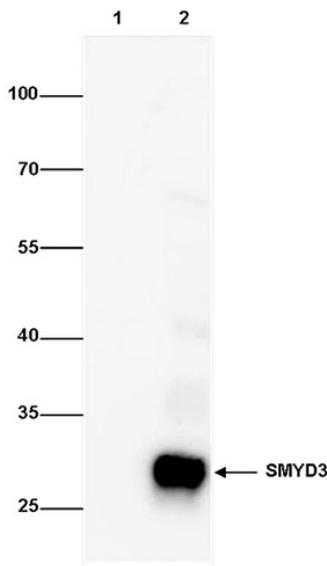
SMYD3 (UniProt/Swiss-Prot entry Q9H7B4) is a histone methyltransferase which specifically di- and trimethylates histone H3. It is also able to methylate lysine 5 of histone H4 but does not monomethylate H3K4. SMYD3 is part of an RNA polymerase complex and hence plays an important role in transcriptional activation.

**Validation Data**



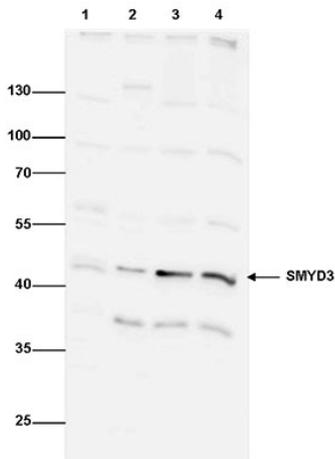
**Figure 1. ChIP results obtained with the Diagenode antibody directed against SMYD3**

ChIP was performed on HepG2 cells with 5 µg of the Diagenode antibody against SMYD3 (Cat. No. C15410253). IgG (5 µg/IP) was used as negative IP control. QPCR was performed with primers for the 5' flanking region of Nkx2.8. Figure 1 shows the fold enrichment over the IgG negative control.



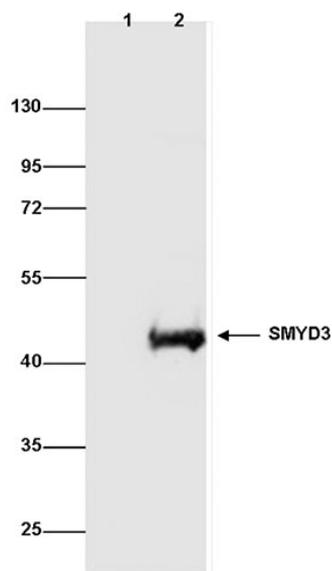
**Figure 2. Western blot analysis using the Diagenode antibody directed against SMYD3**

Whole cell extracts from 293T cells (30 µg) transfected with a SMYD3 expression vector (lane 2, partial fragment) and untransfected control cells (lane 1) were analysed by western blot using the Diagenode antibody against SMYD3 (Cat. No. C15410253) diluted 1:1,000. The position of the protein of interest is indicated on the right; the marker (in kDa) is shown on the left.



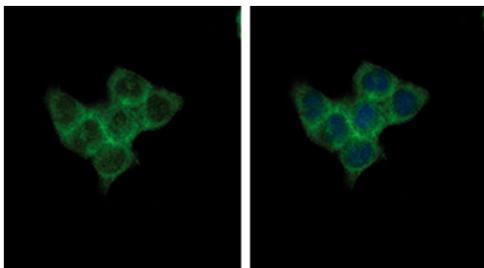
**Figure 3. Western blot analysis using the Diagenode antibody directed against SMYD3**

Whole cell extracts (30 µg) from 293T, A431, HeLa and HepG2 cells (lane 1, 2, 3 and 4, respectively) were analysed by western blot using the Diagenode antibody against SMYD3 (Cat. No. C15410253) diluted 1:1,000. The position of the protein of interest is indicated on the right; the marker (in kDa) is shown on the left.



**Figure 4. Immunoprecipitation using the Diagenode antibody directed against SMYD3**

Immunoprecipitation was performed on whole cell extracts from 293T cells using 5 µg of the Diagenode antibody against SMYD3 (Cat. No. C15410253) (lane 2) or with an equal amount of rabbit IgG (lane 1). The immunoprecipitated SMYD3 protein was detected by western blot with the SMYD3 antibody diluted 1:1,000.



**Figure 5. Immunofluorescence using the Diagenode antibody directed against SMYD3**

HCT116 cells were stained with the Diagenode antibody against SMYD3 (Cat. No. C15410253). Cells were fixed with ice-cold methanol for 5 min and blocked with PBS/TX-100 containing 5% normal goat serum and 1% BSA. The cells were immunofluorescently labeled with the SMYD3 antibody (left) diluted 1:500 in blocking solution. The right panel shows costaining with Hoechst 33342.