diagenode
Innovating Epigenetic Solutions

Ash2 polyclonal antibody

Other names: ASH2L, ASH2L1, ASH2L2, Bre2

Cat. No. C15310093 (CS-093-100)
Type: Polyclonal
Source: Rabbit
Lot #: A260-004
Size: 100 µl
Concentration: not determined

Specificity: Mouse: positive - Other species: not tested.
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.

Description: Polyclonal antibody raised in rabbit against mouse Ash2 (absent, small, or homeotic 2), using 3 different KLH-conjugated synthetic peptides, 2 containing an amino acid sequence from the central and 1 containing an amino acid sequence from the C-terminal part of the protein [1].

Applications

	Suggested dilution	References
ELISA	1:100 - 1:500	Fig 1
Western blotting	1:500 - 1:1,000	Fig 2
Immunofluorescence	1:200	Fig 3

References

1) Peptide design by Andrea Kranz, **Western blot analysis by Giovanni Ciotta, Heike Petzold and Andrea Kranz BIOTEC, Dept. of Genomics**, *Prof. F. Stewart, TU Dresden, Tatzberg 47/49, 01307 Dresden, Germany.*

Target description

Ash2 (UniProtKB/Swiss-Prot entry Q9UBL3) is a component of the Set1/Ash2 histone methyltransferase (HMT) complex. This complex specifically methylates K4 of histone H3, thereby activating transcription. Methylation of K4 is blocked by premethylation of the neighboring K9, a repressor of transcription. This indicates that the Set1/Ash2 HMT complex mediates the crosstalk between K9 methylation and K4 methylation. Ash2 plays a role in hematopoiesis and may be associated with some kinds of leukemia.

Results

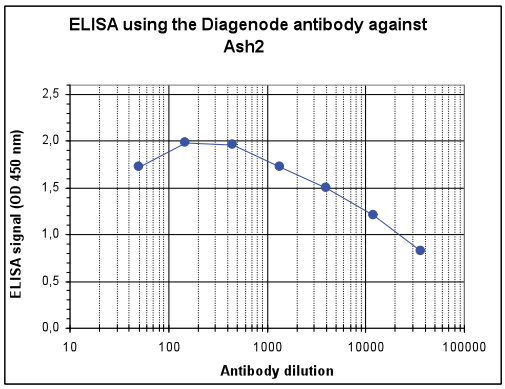

Figure 1. Determination of the titer

To determine the titer, an ELISA was performed using a serial dilution of the Diagenode antibody directed against mouse Ash2 (Cat. No. C15310093). The wells were coated with the peptides used for immunisation of the rabbit. By plotting the absorbance against the antibody dilution (Figure 1), the titer of the antibody was estimated to be 1:24,000.

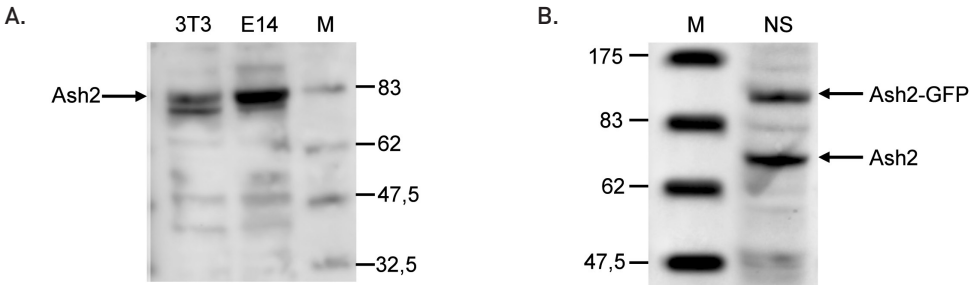

Figure 2. Western blot analysis using the Diagenode antibody directed against Ash2 [1]

A. Western blot was performed on whole cell lysates from mouse fibroblastst (NIH3T3) and embryonic stem cells (E14Tg2a) with the Diagenode antibody against mouse Ash2 (Cat. No. C15310093), diluted 1:1,000 in BSA/PBS-Tween. The molecular weight marker (in kDa) is shown on the right; the location of the protein of interest (predicted size: 68 kDa) is indicated on the left.

B. Western blot was performed on whole cell lysates from mouse neural stem cells (NS), transfected with GFP tagged Ash2, with the Diagenode antibody against mouse Ash2 (Cat. No. C15310093), diluted 1:500 in BSA/PBS-Tween. The molecular weight marker (in kDa) is shown on the left; the location of the endogenous Ash2 (68 kDa) and of the GFP tagged Ash2 (106 kDa) are indicated on the right.

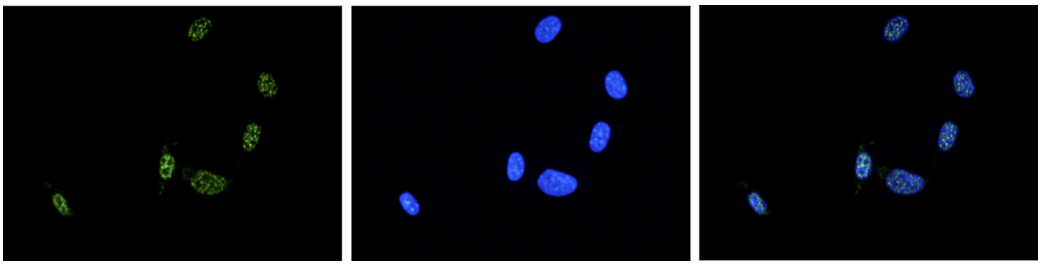

Figure 3. Immunofluorescence using the Diagenode antibody directed against Ash2

NIH3T3 cells were stained with the Diagenode antibody against Ash2 (Cat. No. C15310093) and with DAPI. Cells were fixed with 4% formaldehyde for 10' and blocked with PBS/TX-100 containing 5% normal goat serum and 1% BSA. The cells were immunofluorescently labelled with the Ash2 antibody (left) diluted 1:200 in blocking solution followed by an anti-rabbit antibody conjugated to Alexa488. The middle panel shows staining of the nuclei with DAPI. A merge of the two stainings is shown on the right.

Diagenode sa. BELGIUM | EUROPE
LIEGE SCIENCE PARK
Rue Bois Saint-Jean, 3
4102 Seraing (Ougrée) - Belgium
Tel: +32 4 364 20 50
Fax: +32 4 364 20 51
orders@diagenode.com
info@diagenode.com

Diagenode Inc. USA | NORTH AMERICA
400 Morris Avenue, Suite 101
Denville, NJ 07834 - USA
Tel: +1 862 209-4680
Fax: +1 862 209-4681
orders.na@diagenode.com
info.na@diagenode.com

Last update: January 2, 2014