

Product datasheet

Human SETD2 (KMT3A / HYPB / HIF-1) knockout HEK-293T cell lysate ab257274

3 Images

Overview

Product name	Human SETD2 (KMT3A / HYPB / HIF-1) knockout HEK-293T cell lysate
Product overview	Knockout cell lysate achieved by CRISPR/Cas9.
Parental Cell Line	HEK293T
Organism	Human
Mutation description	Knockout achieved by using CRISPR/Cas9, 11 bp deletion in exon 3 and 4 bp deletion in exon 3.
Passage number	<20
Knockout validation	Sanger Sequencing, Western Blot (WB)
Reconstitution notes	To use as WB control, resuspend the lyophilizate in 50 µL of LDS* Sample Buffer to have a final concentration of 2 mg/ml. For reducing conditions, we recommend a final concentration of 0.1 M DTT. <i>*Usage of SDS sample buffer is not recommended with these lyophilized lysates.</i>

Notes

Lysate preparation: Our lysates are made using RIPA buffer to which we add a protease inhibitor cocktail and phosphatase inhibitor cocktail (ratio: 300:100:10). *This means that the protein of interest is denatured.* If you require a native form of the protein please use the live cell version - found [here](#). Please refer to our lysis protocol for further details on how our lysates are prepared.

User storage instructions: Lyophilizate may be stored at 4°C. After reconstitution, store at -20°C for short-term storage or -80°C for long-term storage.

Access thousands of knockout cell lysates, generated from commonly used cancer cell lines.

[See here for more information on knockout cell lysates.](#)

Abcam has not and does not intend to apply for the REACH Authorisation of customers' uses of products that contain European Authorisation list (Annex XIV) substances.

It is the responsibility of our customers to check the necessity of application of REACH Authorisation, and any other relevant authorisations, for their intended uses.

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Tested applications

Suitable for: WB

Properties

Storage instructions Store at -80°C. Please refer to protocols.

Components	1 kit
ab260953 - Human SETD2 knockout HEK293T cell lysate	1 x 100µg
ab255553 - Human wild-type HEK293T cell lysate	1 x 100µg

Cell type epithelial

STR Analysis Amelogenin X D5S818: 8, 9 D13S317: 12, 14 D7S820: 11 D16S539: 9, 13 vWA: 16, 19 TH01: 7, 9.3 TPOX: 11 CSF1PO: 11, 12

Target

Function Histone methyltransferase that methylates 'Lys-36' of histone H3. H3 'Lys-36' methylation represents a specific tag for epigenetic transcriptional activation. Probably plays a role in chromatin structure modulation during elongation via its interaction with hyperphosphorylated POLR2A. Binds DNA at promoters. May also act as a transcription activator that binds to promoters. Binds to the promoters of adenovirus 12 E1A gene in case of infection, possibly leading to regulate its expression.

Tissue specificity Ubiquitously expressed.

Sequence similarities Belongs to the histone-lysine methyltransferase family. SET2 subfamily. Contains 1 AWS domain. Contains 1 post-SET domain. Contains 1 SET domain. Contains 1 WW domain.

Domain The low charge region mediates the transcriptional activation activity.

Post-translational modifications May be automethylated.

Cellular localization Nucleus. Chromosome.

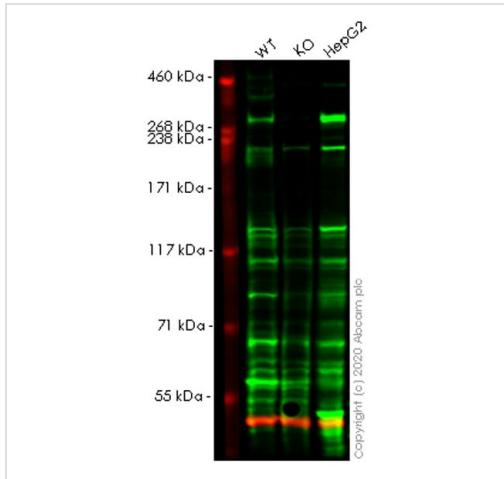
Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab257274 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Predicted molecular weight: 288 kDa.

Images



Western blot - Human SETD2 knockout HEK293T cell lysate (ab257274)

Lane 1: Wild-type HEK293T cell lysate (20 µg)

Lane 2: SETD2 knockout HEK293T cell lysate (20 µg)

Lane 3: HepG2 cell lysate (20 µg)

Lanes 1-3: Merged signal (red and green). Green - **ab31358** observed at 288 kDa. Red - loading control, **ab7291** observed at 50 kDa.

ab31358 Anti-KMT3A / HYPB / HIF-1 antibody was shown to specifically react with KMT3A / HYPB / HIF-1 in wild-type HEK293T cells. Loss of signal was observed when knockout cell line **ab266690** (knockout cell lysate ab257274) was used. Wild-type and KMT3A / HYPB / HIF-1 knockout samples were subjected to SDS-PAGE. **ab31358** and Anti-alpha Tubulin antibody [DM1A] - Loading Control (**ab7291**) were incubated overnight at 4°C at 1 in 500 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti- Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) and Goat anti- Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1 in 10000 dilution for 1 hour at room temperature before imaging.

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Mut  GACCTAGAGTGAGATCTGCTCC-----CTTTCTGATCTACATCGGGAAGATACA
      |||
WT   GACCTAGAGTGAGATCTGCTCCGCCGTCGCTCTCTTTCTGATCTACATCGGGAAGATACA
  
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Sanger Sequencing - Human SETD2 knockout HEK293T cell lysate (ab257274)

Allele-1: 11 bp deletion in exon 3

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Mut  GACCTAGAGTGAGATCTGCTCC----TCGCTCTTTCTGATCTACATCGGGAAGATACA
      |||
WT   GACCTAGAGTGAGATCTGCTCCGCCGTCGCTCTCTTTCTGATCTACATCGGGAAGATACA
  
```

Sanger Sequencing - Human SETD2 knockout HEK293T cell lysate (ab257274)

Allele-2: 4 bp deletion in exon 3

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