

# PHF1 Antibody (monoclonal) (M04)

Mouse monoclonal antibody raised against a partial recombinant PHF1.

Catalog # AT3294a

## Product Information

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|--------------------------|---------------------------|
| <b>Application</b>       | WB, IF, E                 |
| <b>Primary Accession</b> | <a href="#">O43189</a>    |
| <b>Other Accession</b>   | <a href="#">NM_024165</a> |
| <b>Reactivity</b>        | Human, Rat                |
| <b>Host</b>              | mouse                     |
| <b>Clonality</b>         | monoclonal                |
| <b>Isotype</b>           | IgG1 Kappa                |
| <b>Clone Names</b>       | 2G7                       |
| <b>Calculated MW</b>     | 62106                     |

## Additional Information

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|---------------------------|--|
| <b>Gene ID</b>            | 5252   |
| <b>Other Names</b>        | PHD finger protein 1, Protein PHF1, hPHF1, Polycomb-like protein 1, hPCL1, PHF1, PCL1                              |
| <b>Target/Specificity</b> | PHF1 (NP_077084, 2 a.a. ~ 100 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.    |
| <b>Dilution</b>           | WB~~1:500~1000 IF~~1:50~200 E~~N/A   |
| <b>Format</b>             | Clear, colorless solution in phosphate buffered saline, pH 7.2 .   |
| <b>Storage</b>            | Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.   |
| <b>Precautions</b>        | PHF1 Antibody (monoclonal) (M04) is for research use only and not for use in diagnostic or therapeutic procedures. |

## Background

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This gene encodes a Polycomb group protein. The protein is a component of a histone H3 lysine-27 (H3K27)-specific methyltransferase complex, and functions in transcriptional repression of homeotic genes. The protein is also recruited to double-strand breaks, and reduced protein levels results in X-ray sensitivity and increased homologous recombination. Multiple transcript variants encoding different isoforms have been found for this gene.

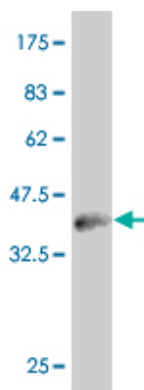
## References

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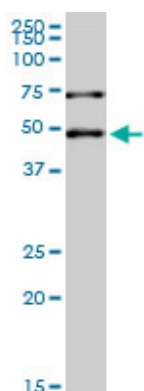
High-density SNP screening of the major histocompatibility complex in systemic lupus erythematosus

demonstrates strong evidence for independent susceptibility regions. Barcellos LF, et al. PLoS Genet, 2009 Oct. PMID 19851445. Transcriptomic and genetic studies identify IL-33 as a candidate gene for Alzheimer's disease. Chapuis J, et al. Mol Psychiatry, 2009 Nov. PMID 19204726. An endometrial stromal sarcoma cell line with the JAZF1/PHF1 chimera. Panagopoulos I, et al. Cancer Genet Cytogenet, 2008 Sep. PMID 18722875. A polycomb group protein, PHF1, is involved in the response to DNA double-strand breaks in human cell. Hong Z, et al. Nucleic Acids Res, 2008 May. PMID 18385154. Ezh2 requires PHF1 to efficiently catalyze H3 lysine 27 trimethylation in vivo. Sarma K, et al. Mol Cell Biol, 2008 Apr. PMID 18285464.

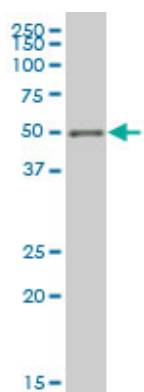
## Images



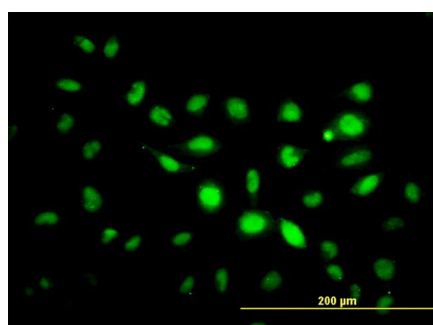
Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.63 KDa) .



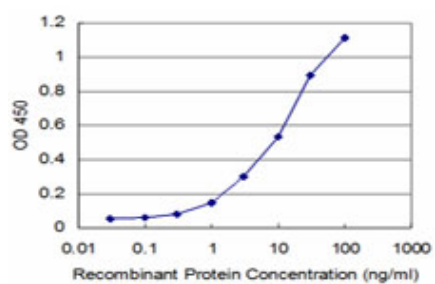
PHF1 monoclonal antibody (M04), clone 2G7. Western Blot analysis of PHF1 expression in PC-12 (Cat # AT3294a )



PHF1 monoclonal antibody (M04), clone 2G7 Western Blot analysis of PHF1 expression in HeLa S3 NE ( Cat # AT3294a )



Immunofluorescence of monoclonal antibody to PHF1 on HeLa cell. [antibody concentration 10 ug/ml]



Detection limit for recombinant GST tagged PHF1 is approximately 1 ng/ml as a capture antibody.

## Citations

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- [Polycomb group protein PHF1 regulates p53-dependent cell growth arrest and apoptosis.](#)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.