

Histone Methyltransferase Screening Services

Epigenetic regulation of transcription is governed by DNA methylation and post-translational histone modifications. While histone acetylation is well-characterized, the study of histone methylation is more nascent. Histone methyltransferases (HMTs) are critical for transcriptional regulation in both normal and diseased states, and abnormal histone methylation has been linked to a large number of human cancers and other diseases. HMTs show great potential as biomarkers for the diagnosis and prognosis of cancers and are important targets for drug discovery.

BPS Bioscience offers a panel of over 20 unique HMTs, including both arginine and lysine methyltransferases, for the evaluation of lead compounds:

HMT Assays		
EZH1	MLL1 Complex	SETDB1
EZH2	NSD1	SETD2
EZH2 (Y641C)	NSD2	SET7/9
EZH2 (Y641F)	PRMT1	SET8
EZH2 (Y641H)	PRMT3	SMYD2
EZH2 (Y641N)	PRMT4	SUV39H1
EZH2 (Y641S)	PRMT5	SUV39H2
G9a	PRMT6	SUV4-20H1
GLP	PRMT8	

*To review sample data for the HMT assays listed above, click on the following link or copy and paste it into your web browser: http://www.bpsbioscience.com/images/pdf/HMT_profiling_data.pdf

- Fast turn-around time, typically under 2 weeks
- Determine IC₅₀ values (10 point, duplicate) or screen a single concentration over our full panel of enzymes.
- Standard enzyme panels available, or customize to meet your needs
- Enzyme activity is validated on every assay to ensure reliable results
- Choice of dose range and concentrations

Sample Results: Inhibition Curves

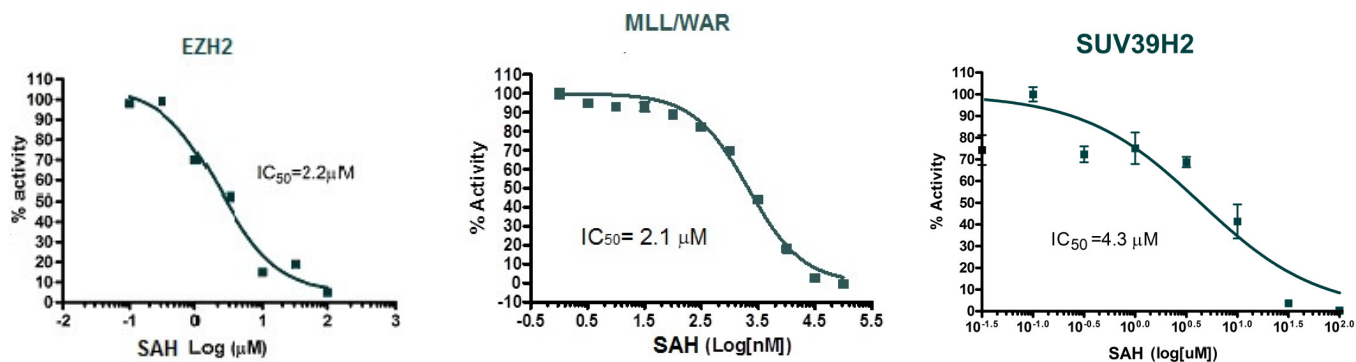


Figure 1. Inhibition of EZH2 Complex, MLL Complex and SUV39H2 by S-Adenosyl-L-homocysteine (SAH) using BPS Bioscience's HMT screening and profiling services, proteins, assay kits and inhibitors.

Contact us for a free quotation or information on our HMT Screening and Profiling Services by visiting: www.bpsbioscience.com/contact-us