

Antibody Use in Drug Discovery Research

Epigenetic targets are the most promising class of drugable targets to emerge in a decade as they are not only relevant to oncology research, but also have potential in metabolic, neurological, inflammatory and cardiovascular disorders. Antibodies are an important tool used in drug development to better understand the epigenetic changes and potential off-target effects. Active Motif's extensive portfolio of antibodies against DNA methylation, histone modifications and histone modifying enzymes will help advance research in all phases of drug discovery.

Target ID

Target Validation

Screen

Preclinical Development

Minimize risks

Active Motif specializes in manufacturing antibodies against histone modifications and chromatin proteins. Because we manufacture and test our own antibodies, we can deliver the high-quality antibodies that your research requires.

Assay compatible formulations

Antibody formulations containing glycerol, BSA, amine-containing azides, Tris or glycine can wreak havoc on established assays. Active Motif offers antibodies in PBS, so that they can be seamlessly integrated into existing pipelines.

Large lot sizes

We produce large lots to ensure consistency in all phases of the drug discovery process, including antibody-based HTS.

Specificity is rigorously tested

Active Motif histone antibodies are tested for cross-reactivity to multiple histone tail modifications.

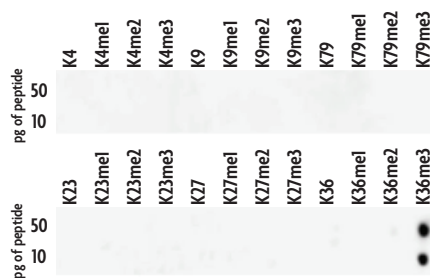


Figure 1: Dot blot analysis of Histone H3K36me3 pAb. The reactivity of Histone H3K36me3 pAb (Cat. No. 61101) to various H3 lysine modifications was tested by dot blot.

Tools to build assays

Active Motif antibodies are compatible with many applications and can be combined with our recombinant modified histones and recombinant histone modifying enzymes to build assays quickly. Antibodies against modified histone and histone modifying enzyme pairs include: EZH2 & H3K27me3; MMSET & H3K36me2; LSD1 & H3K4me2; DOTIL & H3K79me2.

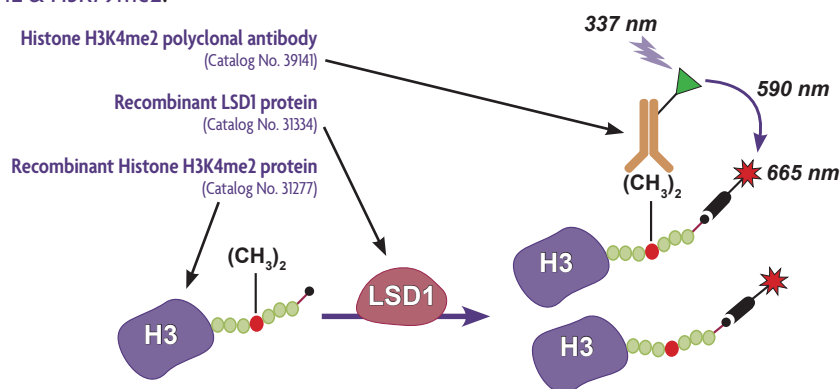


Figure 2: Time-Resolved FRET assay to monitor demethylation of H3K4 by LSD1.

DRUG TARGET ANTIBODIES

Target	Antibody	Format	Catalog No.
HMTs	DOTIL antibody (pAb)	100 µl	39953
	EZH2 antibody (pAb)	100 µl	39901
	MLL / HRX antibody (pAb)	100 µg	61295
HDMs	JARIDIC / KDM5C antibody (pAb)	200 µl	39229
	JMJD2A antibody (mAb)	100 µg	39815
	JMJD2B / KDM4B antibody (pAb)	100 µl	61221
HATs	GCN5 antibody (mAb)	100 µg	39975
	MOF / MYST1 antibody (pAb)	100 µl	61245
HDACs	HDAC1 antibody (pAb)	100 µg	40967
	HDAC2 antibody (mAb)	200 µl	39533
	SIRT1 antibody (mAb)	200 µg	39353
Readers	BRD4 antibody (pAb)	100 µl	39909
	PELP1 antibody (pAb)	100 µl	61263
DNMTs	DNMT1 antibody (mAb)	100 µg	39204
	DNMT2 antibody (pAb)	100 µg	39205
	DNMT3A antibody (mAb)	100 µg	39206