

Product datasheet for AP03036HR-N

OriGene Technologies, Inc.

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Methylated Lysine Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: ELISA, WB

Recommended Dilution: ELISA.

Western blot: 1/2000-1/5000 (4).

0.2-0.5 µg/ml of this HRP conjugated antibody was sufficient for detection of the methylated

histone by western blot analysis using melanoma cells in TBSt.

Host: Rabbit

Isotype: IgG

Clonality: Polyclonal

Immunogen: Methylated KLH

Specificity: This antibody detects proteins containing methylated Lysine residues in SDS-PAGE

immunoblots (Multi-species).

Formulation: PBS

Label: HRP

State: Aff - Purified

State: Liquid purified Ig fraction

Stabilizer: 50% Glycerol

Preservative: 0.091% Sodium Azide

Concentration: lot specific

Purification: Affinity Chromatography

Conjugation: HRP

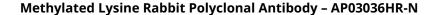
Storage: Store at 2 - 8 °C up to one week or (in aliquots) at -20 °C for longer. Avoid repeated freezing

and thawing.

Centrifuge vial before opening.

Stability: Shelf life: one year from despatch.







Background:

Post-translational modifications of proteins play critical roles in the regulation and function of many known biological processes. Proteins can be post-translationally modified in many different ways, and a common posttranscriptional modification of Lysine involves methylation (1). Lysine can be methylated once, twice or three times by lysine methyltransferases. The transfer of methyl groups from S-adenosyl methionine to histones is catalyzed by enzymes known as histone methyltransferases. Histones which are methylated on certain residues can act epigenetically to repress or activate gene expression (1, 2).

The transcriptional repressor SUV39H1 can encode novel enzymes which selectively methylate histone H3 at lysine 9. SUV39H1 places a methyl marker on histone H3, which is then recognized by HP1 through its chromo domain. This model may also explain the stable inheritance of the heterochromatic state (3). Some studies have also speculated a stimulatory role for transcription by methylated histone lyside 4 due to its presence at active transcription sites (4-6).