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Set9 polyclonal antibody
Rabbit Polyclonal Antibody
Catalog # ABV11376

Specification

Set9 polyclonal antibody - Product Information

Application	**WB**
Primary Accession	Q8WTS6
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**40721**

Set9 polyclonal antibody - Additional Information

Gene ID 80854

Positive Control	**Western blot: HeLa cells**
Application & Usage	**Western Blot: 1:1000**

Other Names
SET7, SET7/9, KMT7, H3-K4-HMTase

Target/Specificity
Set9

Antibody Form
Liquid

Appearance
Colorless liquid

Formulation
In PBS with 0.05% sodium azide and 0.05% ProClin 300.

Handling
The antibody solution should be gently mixed before use.

Reconstitution & Storage
-20 °C

Background Descriptions

Precautions
Set9 polyclonal antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Set9 polyclonal antibody - Protein Information

Name SETD7

Function
Histone methyltransferase that specifically monomethylates 'Lys-4' of histone H3 (PubMed:11779497, PubMed:11850410, PubMed:12588998, PubMed:12540855, PubMed:16141209). H3 'Lys-4' methylation represents a specific tag for epigenetic transcriptional activation (PubMed:12588998, PubMed:12540855, PubMed:16141209). Plays a central role in the transcriptional activation of genes such as collagenase or insulin (PubMed:16141209, PubMed:12588998). Recruited by IPF1/PDX-1 to the insulin promoter, leading to activate transcription (PubMed:16141209). Has also methyltransferase activity toward non- histone proteins such as CGAS, p53/TP53, TAF10, and possibly TAF7 by recognizing and binding the [KR]-[STA]-K in substrate proteins (PubMed:15099517, PubMed:35210392, PubMed:15525938, PubMed:16415881). Monomethylates 'Lys-189' of TAF10, leading to increase the affinity of TAF10 for RNA polymerase II (PubMed:15099517, PubMed:16415881). Monomethylates 'Lys-372' of p53/TP53, stabilizing p53/TP53 and increasing p53/TP53-mediated transcriptional activation (PubMed:17108971, PubMed:15525938, PubMed:16415881). Monomethylates 'Lys-491' of CGAS, promoting interaction between SGF29 and CGAS (By similarity).

Cellular Location
Nucleus. Chromosome

Tissue Location
Widely expressed. Expressed in pancreatic islets.

Set9 polyclonal antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Set9 polyclonal antibody - Images

Set9 polyclonal antibody - Background

Set9 is a histone methyltransferase which specifically methylates lysine 4 of histone H3 being a specific tag for epigenetic transcriptional activation. Further, methylation of histone H3K4 by Set9 precludes deacetylation of H3 by the NuRD complex and impairs Suv39h1-mediated methylation of H3K9. Set9 also methylates the tumor suppressor p53 at lysine 372, thereby enhancing its stability. It contains a SET domain but lacks the pre- and post-SET domains).